AD9907181C2

Service Manual

Stereo Integrated Amplifier

SU-A808

Colour

(K).....Black Type

Areas

(E).....Europe and Russia.

(EB).....Great Britain.

(EG).....Germany, France and Italy.

SPECIFICATIONS

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1. Before Repair

1. **Turn off the power supply. Using a 10 Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C702) in order to discharge the voltage.**
2. **Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230/240 V.**

Power supply voltage	AC 230 V, 50 Hz	AC 240 V, 50 Hz
Consumed current	70-270 mA	60-260 mA

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.

- Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are shorted, or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined bellow:

1. **Switch OFF the power.**
2. **Determine the cause of the problem and correct it.**
3. **Switch ON the power once again.**

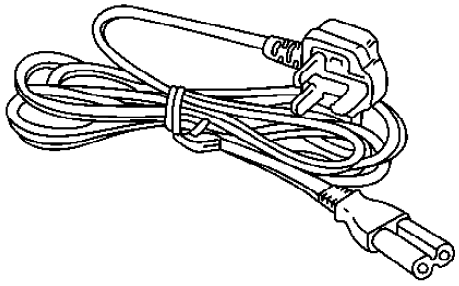
Note:

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and ON again.

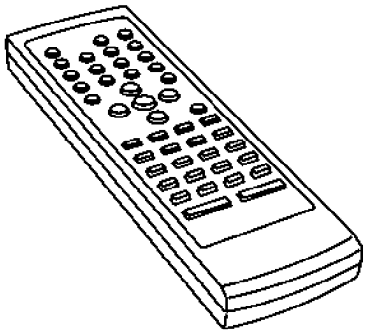
3. Accessories

- AC mains lead

(E) and (EG) areas : (RJA0019-X)..... 1 pc.
(EB) area : (RJA0053-2X).....1 pc.



- Remote control transmitter
(RAK-SUA11WH).....1 pc.



- Batteries
(R6/LR6, AA, UM-3).....2 pcs.
Note: These are available on sales route.

4. Caution for AC Mains Lead

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5. Operations

6. Operation Checks and Component Replacement /

Procedures

NOTE **1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**

2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

3. Select item from the following index when checks or replacement are required.

• Contents

■ Checking Procedures for each P.C.B.

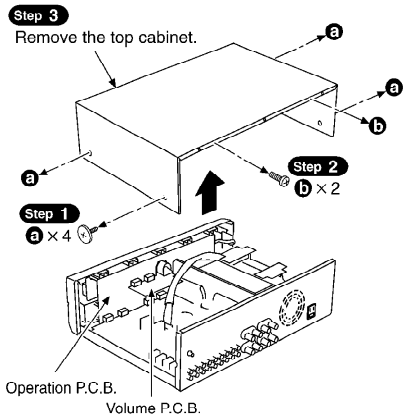
1. Checking for the volume P.C.B. and operation P.C.B..
2. Checking for the main P.C.B..

■ Main Component Replacement Procedures

1. Replacement for the power IC and regulator transistor.

■ Checking Procedures for each P.C.B.

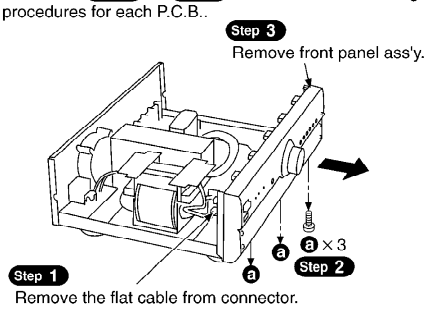
1. Checking for the volume P.C.B. and operation P.C.B.

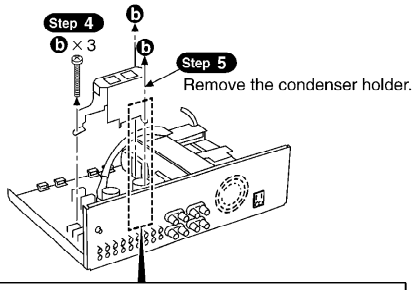


・Check the volume P.C.B. and operation P.C.B. as shown above.

2. Checking for the main P.C.B.

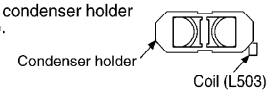
・Follow the Step 1 ~ Step 3 of the item 1 in checking procedures for each P.C.B..

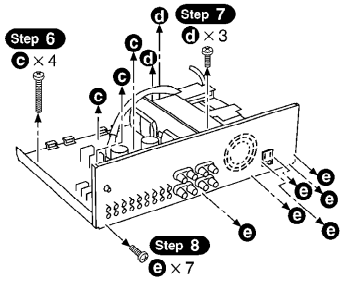


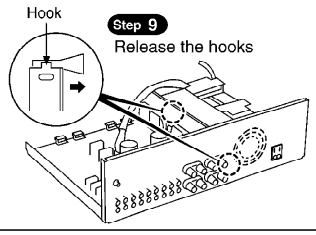


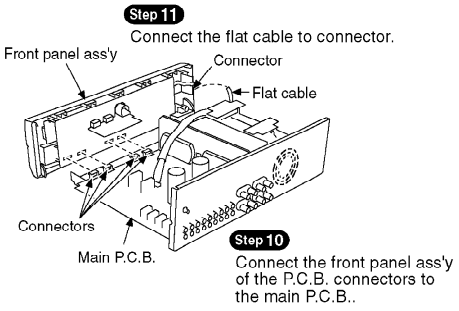
■ Notice for installation of condenser holder

・Do not touch the condenser holder to the coil (L503).

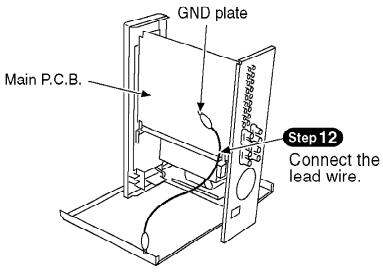








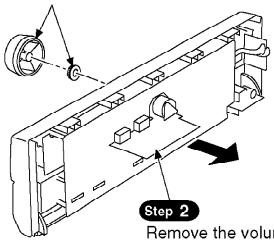
· Check the main P.C.B. as shown below.

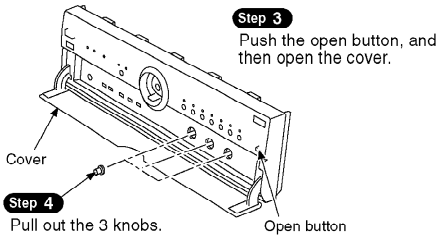


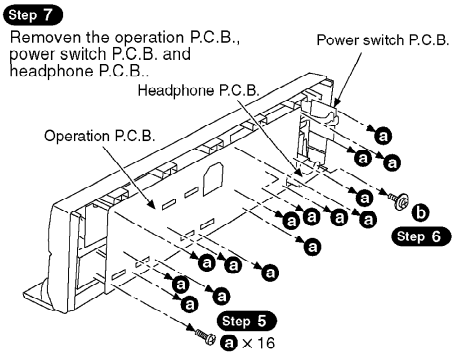
To remove each P.C.B.

- Follow the Step 1 ~ Step 3 of the item 1 in checking procedures for each P.C.B..
- Follow the Step 1 ~ Step 3 of the item 2 in checking procedures for each P.C.B..

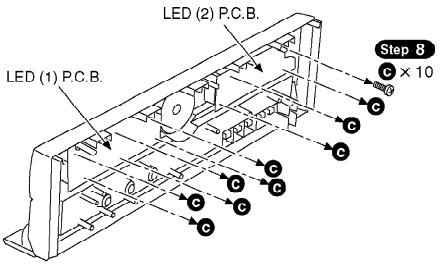
Step 1
Remove the volume knob and nut.







Step 9
Remove the LED (1) P.C.B.and LED (2) P.C.B..

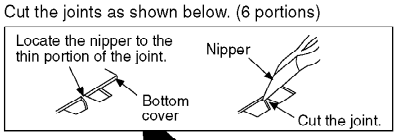


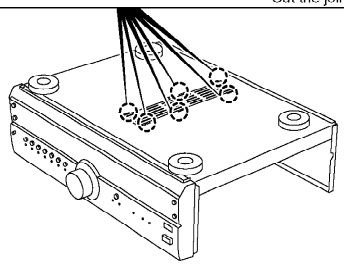
■ Main Component Replacement Procedures

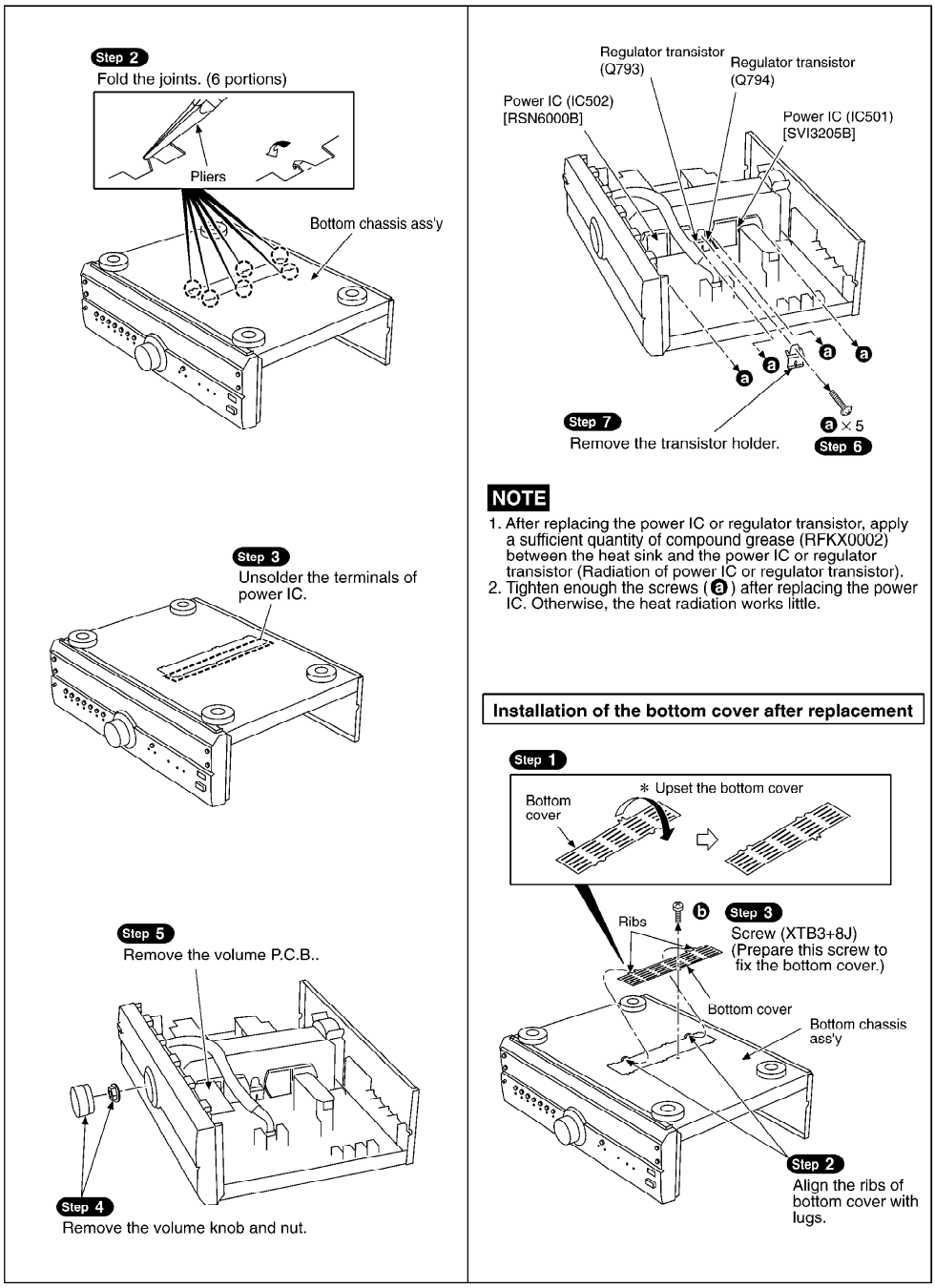
1. Replacement for the power IC and regulator transistor

- Follow the Step 1 ~ Step 3 of the item 1 in checking procedures for each P.C.B..

Step 1
Cut the joints as shown below. (6 portions)






Step 2
Fold the joints. (6 portions)
Pliers
Bottom chassis ass'y
Step 3
Unsolder the terminals of power IC.
Step 5
Remove the volume P.C.B..
Step 4
Remove the volume knob and nut.
Regulator transistor (Q793)
Regulator transistor (Q794)
Power IC (IC502) [RSN6000B]
Power IC (IC501) [SVI3205B]
Step 7
Remove the transistor holder.
a ×5
Step 6
NOTE
1. After replacing the power IC or regulator transistor, apply a sufficient quantity of compound grease (RFKX0002) between the heat sink and the power IC or regulator transistor (Radiation of power IC or regulator transistor).
2. Tighten enough the screws (a) after replacing the power IC. Otherwise, the heat radiation works little.
Installation of the bottom cover after replacement
Step 1
Bottom cover
* Upset the bottom cover
Ribs
b
Step 3
Screw (XTB3+8J) (Prepare this screw to fix the bottom cover.)
Bottom cover
Bottom chassis ass'y
Step 2
Align the ribs of bottom cover with lugs.

7. About the +/- 15 V Line Abnormality Detect Function

1. **This model features the function that shuts down the main power source when it check the ± 15 V line with the IC801 (microcomputer) and find the different voltage. (After power is turned on, the unit enters the stand-by mode.)**
2. **When the unit enters stand-by mode with abnormality detected,**

check the circuits arround the ± 15 V line. (Specially check the abnormality of the stabilizing power source circuit.)

3. To clear this stand-by mode, short-circuit the TP801 land on the circuit board. However, clearance of the stand-by mode and turn on the electricity when the repair is not completed may lead to another trouble. Therefore, be especially careful to do so. (Do not turn on the electricity for a long time.)
4. When the repair is completed, leave the TP801 open.

7.1. About the abnormality detect function with the operation LED turned off

1. If the operation LED is turned off, there are possibilities of the following abnormalities in addition to the LED itself malfunctioning :

   - Power amplifier´s malfunction by the speaker terminal short-circuit.

   - Malfunction of cooling fan.

   The unit features the function that detects above abnormalities.

8. Schematic Diagram

8.1. Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S204:

Unit on/off switch (■ ⏻ ▬ ⏻/I)

S801:

Input select switch (TAPE 1)

S802:

Input select switch (TAPE 2/MD)

S803:

Input select switch (AUX)

S804:

Input select switch (DVD)

S805:

Input select switch (CD)

S806:

Input select switch (TUNER)

S807:

Input select switch (PHONO)

S808:

**VGCA switch (

)**

S809:

Tape monitor (SOURCE) switch (TAPE MONITOR)

S810:

Tape monitor (TAPE 2 /MD) switch (TAPE MONITOR)

S811:

Tape monitor (TAPE 1) switch (TAPE MONITOR)

S812:

Speaker select switch (SPEAKER B)

S813:

Speaker select switch (SPEAKER A)

VR201:

Volume control VR (VOLUME)

VR202:

Balance control VR (BALANCE)

VR203:

Output voltage adjustment VR (L ch)

VR204:

Output voltage adjustment VR (R ch)

VR301:

Tone control VR (BASS)

VR302:

Tone control VR (TREBLE)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark : Power ON

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturers specified parts shown in the parts list.

- Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

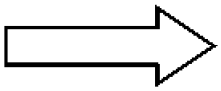
Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

- Voltage and signal line

: Positive voltage line

: Negative voltage line



: Phono signal line

: Tape rec signal line

9. Schematic Diagram

10. Printed Circuit Board Diagram

11. Block Diagram

12. Wiring Connection Diagram

13. Type Illustration of ICs, Transistors and Diodes

14. Measurements and Adjustments

14.1. Measuring Instruments and Special Tools

- AC electronic voltmeter (AC EVM)
- AF oscillator

14.2. Output Voltage Adjustment

1. Turn on the power.
2. Select the input source to TUNER.
3. Connect the measuring instrument as shown Fig.1
4. Apply 1 kHz, 100 mV to TUNER terminal.
5. Adjust the VOLUME to maximum.
6. Adjust VR203 (L ch) and VR204 (R ch) so that the output voltage to AC 14.0 ± 0.2 V. Shown in Fig.2

Fig.1

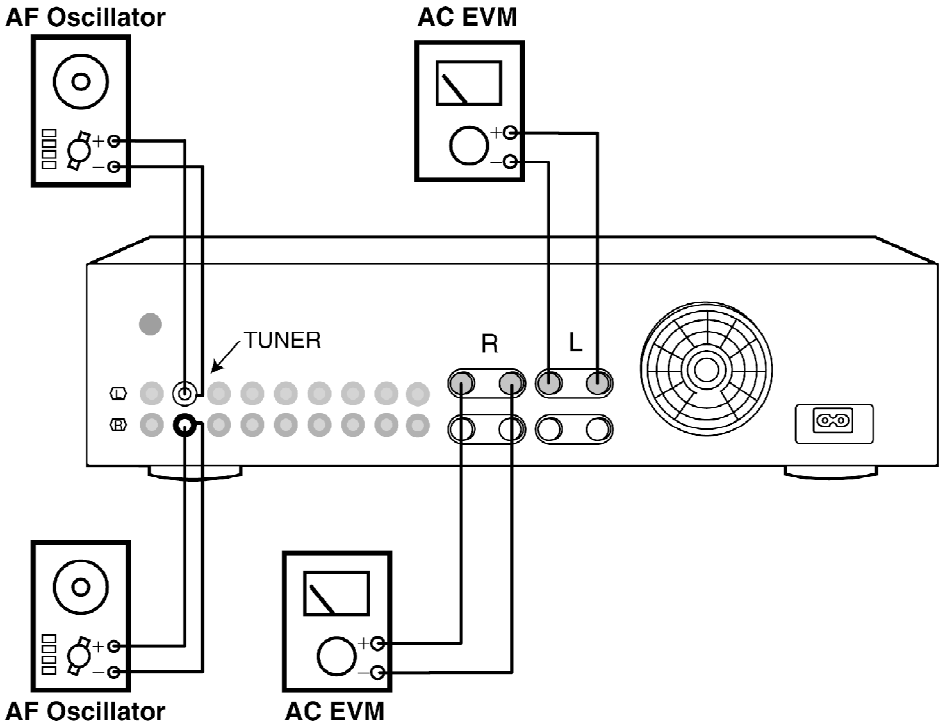
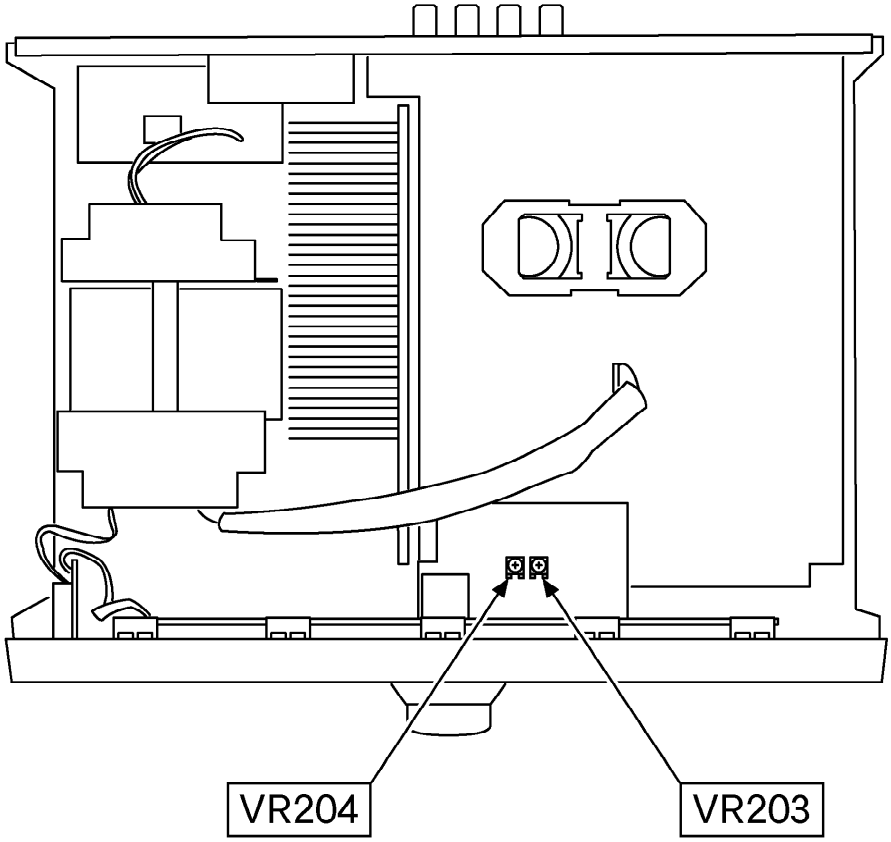


Fig.2

- Adjustment point



15. Terminal Function of ICs

15.1. IC801 (M38503M2405F) : System Control

Pin No.	Name	I/O	Function
1	VCC	I	Power supply terminal
2	VREF	I	Reference voltage input
3	AGND	-	GND terminal
4	MUTE LED	O	LED drive signal output (Mute)
5	STBY LED	O	LED drive signal output (Stand by)
6	REMCON	I	Remote control signal input
7	BACKUP	I	Power failure detect signal input
8	NC	-	Not used, connected to GND
9	SEL DATA	O	Data signal output for input select IC (IC201)
10	SEL CLK	O	Clock signal output for input select IC (IC201)
11	SEL STB	O	Strobe signal output for input select IC (IC201)
12	POWER SW	I	Power switch (S204) detect signal input
13	LED O	-	Not used, open
14	LED C	O	Input select LED drive signal output
15	CNVSS	-	Connected to GND
16	LED B	O	Input select LED drive signal output
17	LED A	O	Input select LED drive signal output
18	RESET	I	System reset signal input
19	X IN	I	Connected to the ceramic oscillator (8 MHz)
20	X OUT	O	Connected to the ceramic oscillator (8 MHz)
21	GND	-	GND terminal
22	TAPE2 LED	O	LED drive signal output (Tape 2)
23	TAPE1 LED	O	LED drive signal output (Tape 1)
24	SOURCE LED	O	LED drive signal output (Source)
25	SP B LED	O	LED drive signal output (Speaker B)

Pin No.	Name	I/O	Function
26	SP A LED	O	LED drive signal output (Speaker A)
27	VRDOWN	O	Motor drive signal output (Volume down)
28	VRUP	O	Motor drive signal output (Volume up)
29	S MUTE	O	Audio muting control signal output
30	POWER	O	Power relay control signal output
31	SP B RLY	O	Speaker B relay control signal output
32	SP A RLY	O	Speaker A relay control signal output
33	VGCA RLY	O	VGCA mode relay control signal output
34	TAPE1 RLY	O	Tape 1 relay control signal output
35	DVD RLY	O	DVD relay control signal output
36	CD RLY	O	CD relay control signal output
37	MON RLY	O	Monitor relay control signal output
38	VGCA LED	O	LED drive signal output (VGCA mode)
39	VIA LED	O	LED drive signal output (VIA mode)
40	REG MON	I	Regulation monitor signal input
41	KEY AD2	I	Operation key signal input
42	KEY AD1	I	Operation key signal input

16. Replacement Parts List

Notes:

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

- The <IA> <IB> <IC> <ID> marks in Remarks indicate language of instruction manual.
  <IA> : English, Spanish, Swedish, Russian, Polish, Czech
  <IB> : English
  <IC> : German, Italian, French
  <ID> : Netherlandish, Danish
- The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
- The marking (RTL) indicates that Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- All parts are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
1	RKM0219F-K	TOP CABINET	1	
2	RHD30035-K1	SCREW	4	
3	RHD30053	SCREW	1	
4	XTBS3+8JFZ1	SCREW	2	
5	RDG0438	GEAR	1	
6	REM0072-3	FAN	1	
7	RHD30070	SCREW	1	
8	RHN30002	NUT	4	
9	RHN30005	NUT	4	
10	RKA0053-A	FOOT	4	
10-1	RMG0270-K	RUBBER	4	
11	RMG0332-K	RUBBER	2	
12	RMR1110-K	TERMINAL COVER	8	
13	RGK1111-K	NUT	4	
14	RHD26033	SCREW	4	
15	RKF0596-Q	DOOR	1	
16	RMR1252-K	ARM(L)	1	
17	RMR1253-K	ARM(R)	1	
18	RGB0031-A	TECHNICS BADGE	1	
19	RGB0112-N	VGCA BADGE	1	
20	RGH0155A-K	SHEET	1	
21	RGK1182-N	BUTTON ORNAMENT	1	
22	RGK1184-S	VOLUME RING	1	
23	RGL0453-Q	PANEL LIGHT 1	2	
24	RGL0456-Q	PANEL LIGHT 2	1	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
25	RGL0457-Q	PANEL LIGHT 3	1	
26	RGP0746A-K	PANEL	1	
27	RGU0890-1K	BUTTON,POWER	1	
28	RGU1712-K	BUTTON,OPEN	1	
29	RGU1782-K	BUTTON,SELECTOR	1	
30	RGU1784-S	BUTTON,SPEAKER	1	
31	RGW0285-S	KNOB,TONE	3	
32	RGW0325-K	KNOB,VOLUME	1	
33	RHD26016	SCREW	2	
34	RHD26034	SCREW	1	
35	RHN90001	NUT	1	
36	RKG0009	MAGNET	1	
37	RKW0273A-K	FILTER	1	
38	RME0284	SPRING	1	
39	RMR1254-K	MAGNET HOLDER	1	
40	RMR1261-K	DAMPER HOLDER	1	
41	XTBS26+8J	SCREW	26	
42	XTBS3+8JFZ1	SCREW	26	
43	XTB3+16F	SCREW	4	
44	XTB3+20JFZ	SCREW	8	
45	XTB3+6G	SCREW	4	
46	XTB3+6JFZ	SCREW	4	
47	XTB3+8JFZ	SCREW	2	
48	XTW3+15T	SCREW	5	
49	XWE3E10	WASHER	4	
A1	RAK-SUA11WH	REMOTE CONT.TRANSMITTER	1	
A1-1	RKK0123-K	BATTERY COVER	1	
A2	RJA0019-X	AC POWER SUPPLY CORD	1	(E,EG) / ⚠
A2	RJA0053-2X	AC POWER SUPPLY CORD	1	(EB) / ⚠
A3	RQA0117	WARRANTY CARD	1	
A4	RQCB0169	SERVICE CENTER LIST	1	
A5	RQT5113-E	OPERATING INSTRUCTIONS	1	(E)<IA>
A6	RQT5116-B	OPERATING INSTRUCTIONS	1	(EB) / <IB>
A7	RQT5114-D	OPERATING INSTRUCTIONS	1	(EG) / <IC>
A8	RQT5115-H	OPERATING INSTRUCTIONS	1	(EG) / <ID>
C103,04	ECBT1H181KB5	50V 180P	2	
C107,08	ECEA1CKS101	16V 100U	2	
C109,10	ECBT1H391KB5	50V 390P	2	
C113,14	ECQB1H223JF3	50V 0.022U	2	
C115,16	ECQB1H562JF3	50V 5600P	2	
C117,18	RCE1HKA4R7BG	50V 4.7U	2	
C119,20	ECQB1H472JF3	50V 4700P	2	
C121,22	ECBT1E103ZF	25V 0.01U	2	
C123,24	RCE1HKA3R3BG	50V 3.3U	2	
C201-16	ECCR1H101K5	50V 100P	16	
C251,52	ECEA0JKS101	6.3V 100U	2	
C253,54	ECQV1H104JM3	50V 0.1U	2	
C301,02	RCE1HKA3R3BG	50V 3.3U	2	
C303,04	ECCR1H101K5	50V 100P	2	
C305,06	ECBT1H820KB5	50V 82P	2	
C307,08	RCE1HKA4R7BG	50V 4.7U	2	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C309,10	ECBT1H390J5	50V 39P	2	
C311,12	RCE1CKA100BG	16V 10U	2	
C313,14	ECQV1H823JZ	50V 0.082U	2	
C315,16	ECQB1H153JF3	50V 0.015U	2	
C317,18	ECQB1H183JF3	50V 0.018U	2	
C319,20	ECQB1H222JF	50V 2200P	2	
C321,22	ECBT1E223ZF	25V 0.022U	2	
C323,24	ECBT1H121KB5	50V 120P	2	
C351,52	ECA1EPXS100B	25V 10U	2	
C353,54	ECBT1H101KB5	50V 100P	2	
C355,56	ECA1APXS470B	10V 47U	2	
C357,58	ECBT1H820KB5	50V 82P	2	
C359,60	ECBT1H180J5	50V 18P	2	
C361-64	ECA1EPXS100B	25V 10U	4	
C367,68	ECA1CPXS330B	16V 33U	2	
C369,70	ECA1EPXS100B	25V 10U	2	
C401,02	ECA1CPXS470B	16V 47U	2	
C403,04	ECKR1H121KB5	50V 120P	2	
C405,06	ECA1APXS101B	10V 100U	2	
C407,08	ECBT1H820KB5	50V 82P	2	
C409,10	ECCR2H330J5	500V 33P	2	
C413,14	ECCV2H070D	500V 7P	2	
C415,16	ECBT1H102KB5	50V 1000P	2	
C426	ECBT1H102KB5	50V 1000P	1	
C427	ECBT1E223ZF	25V 0.022U	1	
C428	ECKR1H103ZF5	50V 0.01U	1	
C451,52	ECKR1H333ZF5	50V 0.033U	2	
C453-56	ECCV2H680K	500V 68P	4	
C457-60	RCE1HKA3R3BG	50V 3.3U	4	
C461,62	ECBA1H681KB5	50V 680P	2	
C501-04	ECA1APXS101B	10V 100U	4	
C505,06	ECQV1H473JM3	50V 0.047U	2	
C507	ECEA1CKS101	16V 100U	1	
C508	ECA1HM470	50V 47U	1	
C509	ECEA1HN100SB	50V 10U	1	
C511,12	ECBT1H680J5	50V 68P	2	
C513-18	ECQV1H473JM3	50V 0.047U	6	
C519-22	ECQB1H223JF3	50V 0.022U	4	
C523,24	ECBT1H102KB5	50V 1000P	2	
C525,26	ECQB1H152JF3	50V 1500P	2	
C531,32	ECBT1C332KR5	16V 3300P	2	
C601,02	RCE1CKA100BG	16V 10U	2	
C603	ECEA0JKS101	6.3V 100U	1	
C604	ECEA1HSN010	50V 1U	1	
C605	ECEA0JKS331	6.3V 330U	1	
C701	ECETX1J153XZ	63V 15000U	1	(E,EG) / ⚠
C701	ECETX1J223XZ	63V 22000U	1	(EB) / ⚠
C702	ECETX1J153XZ	63V 15000U	1	(E,EG) / ⚠
C702	ECETX1J223XZ	63V 22000U	1	(EB) / ⚠
C705	ECBT1H104KB5	50V 0.1U	1	
C707,08	ECA1JPXH560E	63V 56U	2	
C709,10	ECKR2H103ZU	500V 0.01U	2	
C711	ECQE2104KF3	250V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
C712	ECBT1E103ZF	25V 0.01U	1	
C714	ECA1CM471	16V 470U	1	
C715	ECBT1E103ZF	25V 0.01U	1	
C716	RCE1CM102BV	16V 1000U	1	
C751,52	RCE1EFG470BJ	25V 47U	2	
C793,94	ECA1HBX3R3B	50V 3.3U	2	
C801-03	ECBT1E103ZF	25V 0.01U	3	
C804	ECA0JM102	6.3V 1000U	1	
C805	RCE1HKAR47BG	50V 0.47U	1	
C806	ECEA1HKS2R2	50V 2.2U	1	
C807	ECBT1H102KB5	50V 1000P	1	
C808	ECBT1E103ZF	25V 0.01U	1	
C809,10	RCE1AKA470BG	10V 47U	2	
C811	ECBT1H101KB5	50V 100P	1	
C812,13	ECKR1H103ZF5	50V 0.01U	2	
C814,15	ECA1CPXS100B	16V 10U	2	
C816	RCE1CKA100BG	16V 10U	1	
C817	RCE1AKA470BG	10V 47U	1	
C820	ECQV1H224JM3	50V 0.22U	1	
CN201	RJU003K010M1	CONNECTOR(10P)	1	
CN202	RJU003K008M1	CONNECTOR(8P)	1	
CN301 ,02	RJU003K008M1	CONNECTOR(8P)	2	
CN401	RJU057W004	CONNECTOR(4P)	1	
CN601	SJT3213	CONNECTOR(2P)	1	
CN702	RJS1A6607T1	CONNECTOR(7P)	1	
CN703	RJS1A6603	CONNECTOR(3P)	1	
CN704-17	RJS1A1101T1	CONNECTOR(1P)	14	
CN801, 02	RJU003K008M1	CONNECTOR(8P)	2	
CN803	RJU071H11M	CONNECTOR(11P)	1	
CN805	RJU071H11M	CONNECTOR(11P)	1	
CP201	RJT003K010-1	CONNECTOR(10P)	1	
CP202	RJT003K008-1	CONNECTOR(8P)	1	
CP301, 02	RJT003K008-1	CONNECTOR(8P)	2	
CP401	RJT057W004-1	CONNECTOR(4P)	1	
CP801 ,02	RJT003K008-1	CONNECTOR(8P)	2	
CP803	RJT071K11	CONNECTOR(11P)	1	
CP805	RJT071K11	CONNECTOR(11P)	1	
D351	MA165	DIODE	1	
D401,02	MA167	DIODE	2	
D403,04	MA4036M	DIODE	2	
D405,06	MA165	DIODE	2	
D451	MA165	DIODE	1	
D452	MA4056M	DIODE	1	
D453	MA29WA	DIODE	1	
D501,02	MA165	DIODE	2	
D503,04	MA4160M	DIODE	2	
D505	MA165	DIODE	1	
D506	1SS291TA	DIODE	1	
D507	MA165	DIODE	1	
D605	MA4091M	DIODE	1	
D606	MA165	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
D608-10	MA165	DIODE	3	
D611,12	MA167	DIODE	2	
D613	MA700	DIODE	1	
D701-04	P300DLF	DIODE	4	⚠
D705	1SR35200TB	DIODE	1	
D706	MA165	DIODE	1	
D709	MA4056-LTA	DIODE	1	
D710-13	1SR35200TB	DIODE	4	⚠
D793,94	MA165	DIODE	2	
D795,96	MA4140M	DIODE	2	⚠
D797,98	MA165	DIODE	2	
D801	MA4068L	DIODE	1	⚠
D802	1SS291TA	DIODE	1	
D803-07	MA165	DIODE	5	
D808	1SS291TA	DIODE	1	
D809,10	MA165	DIODE	2	
D825-28	MA165	DIODE	4	
D829	MA700	DIODE	1	
D851-57	SLR325VCT31	LED	7	
D858	SLR325DCT31	LED	1	
D859-65	SLR325VCT31	LED	7	
D866,67	SLR325DCT31	LED	2	
F1	XBA2C25TB0	FUSE,T2.5A	1	⚠
IC101	AN6558F	IC	1	
IC201	NJU7312AL	IC	1	
IC251	BA6218	IC	1	
IC301	UPC4570C	IC	1	
IC351,52	NJM4580DD	IC	2	
IC401	AN7062N	IC	1	
IC501	SVI3205B	IC	1	⚠
IC502	RSN6000B	IC	1	
IC601	M5218AP	IC	1	
IC801	M38503M2405F	IC	1	
IC803	TC74HC42AP	IC	1	
JK1	SJS9236	JACK,AC INLET	1	⚠
JK201-04	SJF3069A	JACK,PHONO,TUNER etc.	4	
JK205	SJF3068A	JACK,TAPE1(PLAY)	1	
JK501	RJH4801M-2	JACK,SPEAKERS	1	
JK502	RJJ63TA01	JACK,PHONES	1	
L1	RLQZ271M	COIL	1	⚠
L201-04	ELEXT470KA9	COIL	4	
L251,52	ELEXT1R0KA9	COIL	2	
L501-04	SLQY18G-10	COIL	4	
L801	ELEXT101KA9	COIL	1	
P1	RPQ0164	PAD	1	
P2	RPF0139	PROTECTION COVER	1	
P3	RPG4556	PACKING CASE	1	(E)
P3	RPG4557	PACKING CASE	1	(EB,EG)

13	RF-C455	PACKING CASE	1	(LB,LC)

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
P4	RPN1221	PAD	1	
P5	RPH0032	MIRROR SHEET	1	(EB)
P6	SPP730	SHEET	1	
PCB1	REP2865A-M	MAIN PCB	1	(E,EG) (RTL)
PCB1	REP2865B-M	MAIN PCB	1	(EB) / (RTL)
PCB2	REP2866A-S	SUB PCB	1	(E,EG) (RTL)
PCB2	REP2866B-S	SUB PCB	1	(EB) / (RTL)
Q401,02	2SA992F	TRANSISTOR	2	
Q451,52	2SC1845F	TRANSISTOR	2	
Q453,54	2SC3311AR	TRANSISTOR	2	
Q455,56	2SA1309AR	TRANSISTOR	2	
Q501-03	2SA992F	TRANSISTOR	3	
Q601	2SD893AR	TRANSISTOR	1	
Q602-04	2SA1048GR	TRANSISTOR	3	
Q605,06	2SC3311AR	TRANSISTOR	2	
Q607	UN4113	TRANSISTOR	1	
Q608	UN4213	TRANSISTOR	1	
Q701	2SB621A-R	TRANSISTOR	1	
Q791	2SK330GRYTA	TRANSISTOR	1	⚠
Q792	2SJ105GRYTA	TRANSISTOR	1	⚠
Q793	2SD2374PQAU	TRANSISTOR	1	⚠
Q794	2SB1548PQAU	TRANSISTOR	1	⚠
Q801	UN4211	TRANSISTOR	1	
Q802	UN4111	TRANSISTOR	1	
Q803	UN4211	TRANSISTOR	1	
Q804	UN4111	TRANSISTOR	1	
Q805	UN4211	TRANSISTOR	1	
Q806	UN4111	TRANSISTOR	1	
Q807	UN4211	TRANSISTOR	1	
Q808-10	UN4111	TRANSISTOR	3	
Q811	UN4211	TRANSISTOR	1	
Q812	UN4111	TRANSISTOR	1	
Q813-18	UN4211	TRANSISTOR	6	
Q819	2SD2037DEFTA	TRANSISTOR	1	⚠
Q820	2SK2880BCTA	TRANSISTOR	1	
Q824,25	2SK301QRS	TRANSISTOR	2	
Q826	2SA1048GR	TRANSISTOR	1	
R101,02	ERDS2FJ152	1/4W 1.5K	2	
R105,06	ERDS2FJ224	1/4W 220K	2	
R109,10	ERDS2FJ101	1/4W 100	2	
R113,14	ERDS2FJ563	1/4W 56K	2	
R117,18	ERDS2FJ271	1/4W 270	2	
R123,24	ERDS2FJ680	1/4W 68	2	
R125,26	ERDS2FJ184	1/4W 180K	2	
R127,28	ERDS2FJ123	1/4W 12K	2	
R129,30	ERDS2FJ563	1/4W 56K	2	
R131,32	ERDS2FJ102	1/4W 1K	2	
R201,02	ERDS2FJ102	1/4W 1K	2	
R205-16	ERDS2FJ102	1/4W 1K	12	
R217,18	ERDS2FJ334	1/4W 330K	2	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R219-21	ERDS2FJ103	1/4W 10K	3	
R223,24	ERDS2FJ393	1/4W 39K	2	
R251	ERDS1FJ100	1/2W 10	1	⚠
R301,02	ERDS2FJ563	1/4W 56K	2	
R303,04	ERDS2FJ123	1/4W 12K	2	
R305-08	ERDS2FJ224	1/4W 220K	4	
R309,10	ERDS2FJ392	1/4W 3.9K	2	
R311,12	ERDS2FJ102	1/4W 1K	2	
R313,14	ERDS2FJ223	1/4W 22K	2	
R315,16	ERDS2FJ392	1/4W 3.9K	2	
R317,18	ERDS2FJ183	1/4W 18K	2	
R351,52	ERDS2FJ102	1/4W 1K	2	
R353,54	ERDS2FJ473	1/4W 47K	2	
R355,56	ERDS2FJ102	1/4W 1K	2	
R357,58	ERDS2FJ224	1/4W 220K	2	
R361,62	ERDS2FJ183	1/4W 18K	2	
R365,66	ERDPS2VF102T	1/4W 1K	2	
R367,68	ERDS2FJ392	1/4W 3.9K	2	
R401,02	ERDS2FJ472	1/4W 4.7K	2	
R403,04	ERDS2FJ393	1/4W 39K	2	
R405,06	ERDS2FJ272	1/4W 2.7K	2	
R407,08	ERDS2FJ393	1/4W 39K	2	
R411,12	RREKFJ470VM	1/4W 47	2	
R437	ERDS2FJ473	1/4W 47K	1	
R457	ERDS2FJ153	1/4W 15K	1	
R459,60	RREKFJ101VM	1/4W 100	2	
R461-64	ERDS2FJ333	1/4W 33K	4	
R465-68	RREKFJ101VM	1/4W 100	4	
R469	ERDS2FJ103	1/4W 10K	1	
R470	ERDS2FJ102	1/4W 1K	1	
R471,72	ERDS2FJ561	1/4W 560	2	
R501,02	ERDS2FJ362	1/4W 3.6K	2	
R503,04	RREKFJ121VM	1/4W 120	2	
R505,06	ERDS2FJ392	1/4W 3.9K	2	
R507,08	RREKFJ121VM	1/4W 120	2	
R513-16	RREKFJ100VM	1/4W 10	4	
R517-20	ERDS1FJ6R8	1/2W 6.8	4	⚠
R521,22	ERDS1FJ100	1/2W 10	2	⚠
R527	ERDS2FJ223	1/4W 22K	1	
R528	ERDS2FJ824	1/4W 820K	1	
R529	ERDS2FJ124	1/4W 120K	1	
R530	ERG1SJ272E	1W 2.7K	1	
R531,32	ERDS1FJ100	1/2W 10	2	⚠
R533,34	ERDS2FJ182	1/4W 1.8K	2	
R535	ERDS2FJ562	1/4W 5.6K	1	
R536,37	ERDS2FJ103	1/4W 10K	2	
R550,51	ERDS2FJ222	1/4W 2.2K	2	
R555	ERG1SJ681	1W 680	1	
R556	ERG1SJ561	1W 560	1	
R557	ERG1SJ681	1W 680	1	
R558	ERG1SJ561	1W 560	1	
R559,60	ERDS1FJ152	1/2W 1.5K	2	⚠
R561,62	ERG1SJ151	1W 150	2	

Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R563,64	ERG1SJ181	1W 180	2	
R565-70	ERDS2FJ223	1/4W 22K	6	
R611-14	ERDS2FJ223	1/4W 22K	4	
R615-18	ERDS2FJ103	1/4W 10K	4	
R619	ERDS2FJ151	1/4W 150	1	
R620	ERDS2FJ153	1/4W 15K	1	
R621,22	ERDS2FJ223	1/4W 22K	2	
R624	ERDS2FJ333	1/4W 33K	1	
R625	ERDS2FJ223	1/4W 22K	1	
R626	ERDS2FJ103	1/4W 10K	1	
R628	ERDS2FJ564	1/4W 560K	1	
R629	ERDS2FJ473	1/4W 47K	1	
R630	ERDS2FJ150	1/4W 15	1	
R632	ERDS2FJ222	1/4W 2.2K	1	
R633	ERDS2FJ563	1/4W 56K	1	
R634	ERDS2FJ223	1/4W 22K	1	
R637	ERDS2FJ222	1/4W 2.2K	1	
R707,08	RREKFJ6R8VM	1/4W 6.8	2	
R709,10	RREKFJ470VM	1/4W 47	2	
R711	ERDS2FJ221	1/4W 220	1	
R712	RREKFJ1R0VM	1/4W 1	1	
R713	ERDS2FJ223	1/4W 22K	1	
R714	ERDS2FJ222	1/4W 2.2K	1	
R715	ERDS2FJ221	1/4W 220	1	
R793,94	ERDS2FJ103	1/4W 10K	2	
R795,96	ERDS2FJ105	1/4W 1M	2	
R801	ERDS2FJ821	1/4W 820	1	
R802	ERDS2FJ102	1/4W 1K	1	
R803	ERDS2FJ122	1/4W 1.2K	1	
R804	ERDS2FJ152	1/4W 1.5K	1	
R805	ERDS2FJ182	1/4W 1.8K	1	
R806	ERDS2FJ103	1/4W 10K	1	
R807	ERDS2FJ821	1/4W 820	1	
R808	ERDS2FJ102	1/4W 1K	1	
R809	ERDS2FJ122	1/4W 1.2K	1	
R810	ERDS2FJ152	1/4W 1.5K	1	
R811	ERDS2FJ182	1/4W 1.8K	1	
R812	ERDS2FJ222	1/4W 2.2K	1	
R813	ERDS2FJ103	1/4W 10K	1	
R814	ERDS2FJ1R0	1/4W 1	1	
R815	ERDS2FJ104	1/4W 100K	1	
R816-18	ERDS2FJ102	1/4W 1K	3	
R819	ERDS2FJ104	1/4W 100K	1	
R820	ERDS2FJ102	1/4W 1K	1	
R821,22	ERDS2FJ103	1/4W 10K	2	
R823	ERDS2FJ102	1/4W 1K	1	
R824	ERDS2FJ472	1/4W 4.7K	1	
R825-27	ERDS2FJ104	1/4W 100K	3	
R828	ERDS2FJ102	1/4W 1K	1	
R829	ERDS2FJ103	1/4W 10K	1	
R830	ERDS2FJ223	1/4W 22K	1	
R831	ERDS2FJ333	1/4W 33K	1	
R832,33	ERDS2FJ104	1/4W 100K	2	
R834	ERD2FCJ4R7	1/4W 4.7	1	⚠

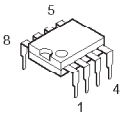
Ref. No.	Part No.	Part Name & Description	Pcs.	Remarks
R835	ERDS2FJ105	1/4W 1M	1	
R845	ERDS2FJ334	1/4W 330K	1	
R851	ERDS2FJ331	1/4W 330	1	
R852	ERDS2FJ271	1/4W 270	1	
R853,54	ERDS2FJ331	1/4W 330	2	
R855	ERDS2FJ271	1/4W 270	1	
R857-61	ERDS2FJ331	1/4W 330	5	
R862	ERDS1FJ471	1/2W 470	1	⚠
RL201-04	RSY0020M-R	RELAY	4	
RL351	RSY0020M-R	RELAY	1	
RL501 ,02	RSY0013M-0	RELAY	2	⚠
RL503	RSY0020M-R	RELAY	1	
RL701, 02	RSY0019M-0	RELAY	2	⚠
S204	RSP2B023-A	SW	1	
S801-13	EVQ21405R	SW	13	
T1	RTP7K5E003BW	POWER TRANSFORMER	1	⚠
TH201, 02	ERTD2ZHL104T	THERMISTOR	2	
VR201	EUWMRUF25461	VR,VOLUME	1	
VR202	EVJ02SFA5G15	VR,BALANCE	1	
VR203 ,04	EVNDXAA00B23	VR,OUTPUT VOLTAGE	2	
VR301, 02	EVJYA1FA5C15	VR,BASS/TREBLE	2	
X801	RSXY8M00D01T	OSCILLATOR	1	
Z801	RCDGP1U27XD	REMOTE SENSOR	1	

17. Cabinet Parts Location

18. Packaging

F990704500YM/MT/YI/KH

UPC4570C
AN6558F



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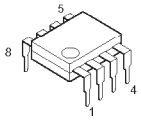

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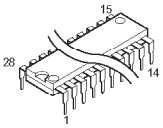

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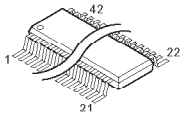

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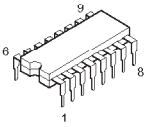

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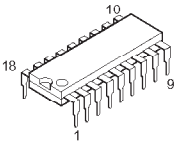
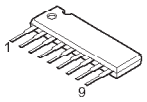
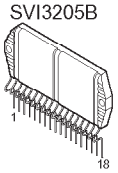
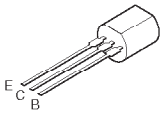


BA6218



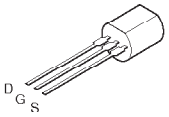
RSN6000B
SVI3205B



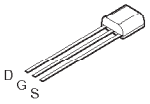


2SA992EFPTA
2SA933QRSTA
2SA1123RSTTA
2SB621AQRSTA
2SC2631RSTTA
2SD893RTA

2SK301QRSTA



2SK2880BCTA



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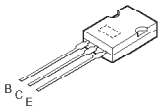

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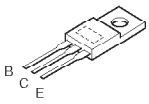
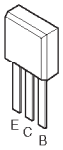
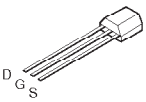
2SB1548PQAU



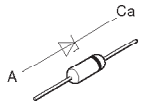


2SA1309ATA
2SC3311ATA
UN4111TA
UN4113TA
UN4211TA
UN4213TA

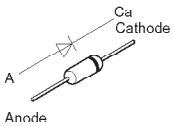
2SJ105GRYTA
2SK330GRYTA



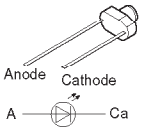
MA4091MTA
MA4056LTA



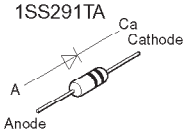
MA165TA
MA29WATA



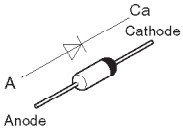
SLR325DCT31
SLR325VCT31



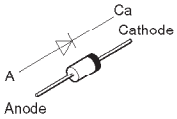
MA167ATA
MA700ATA
1SS291TA



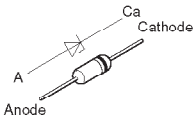
1SR35200TB

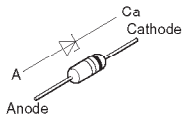


P300DLF



MA4140MTA
MA4160MTA

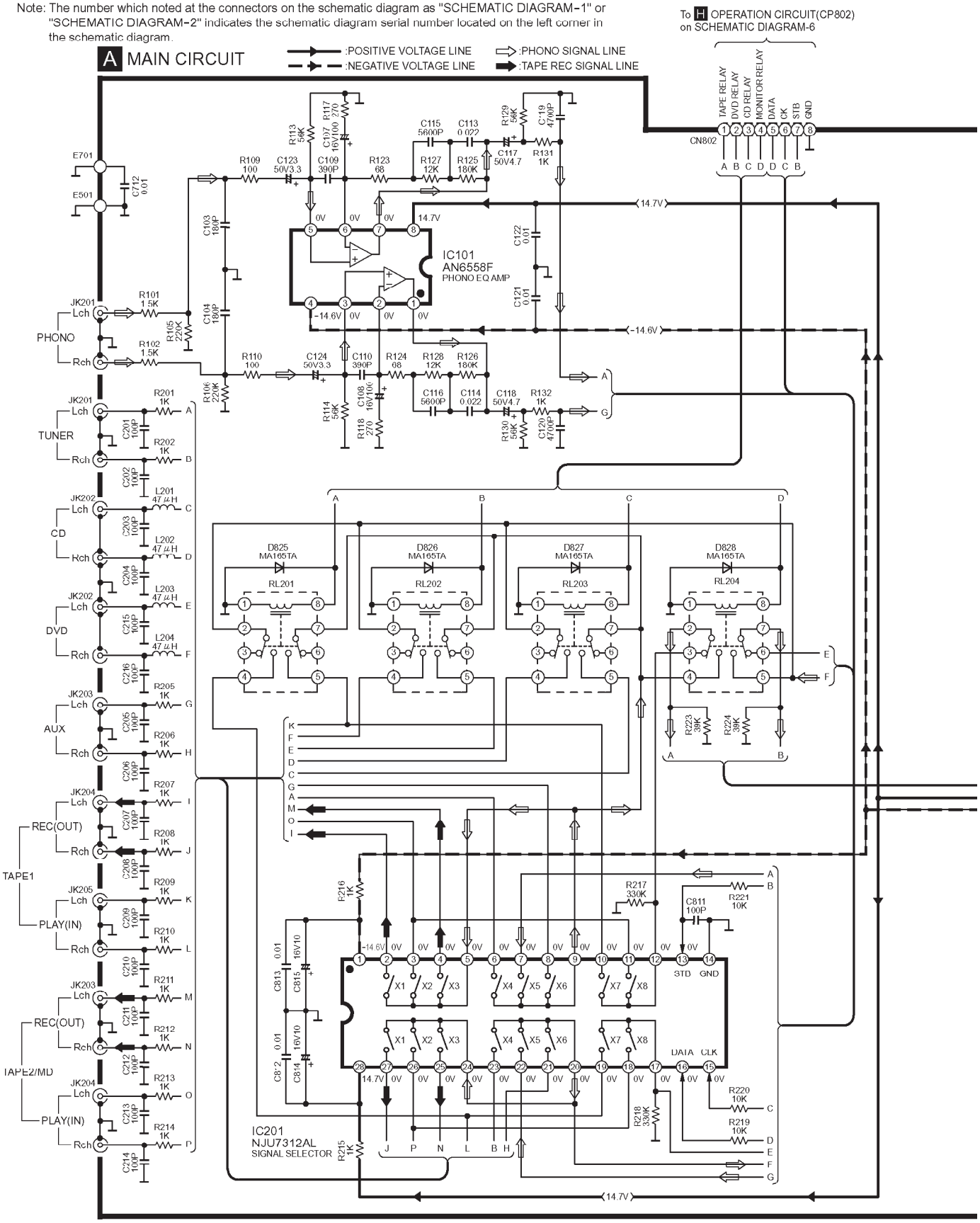




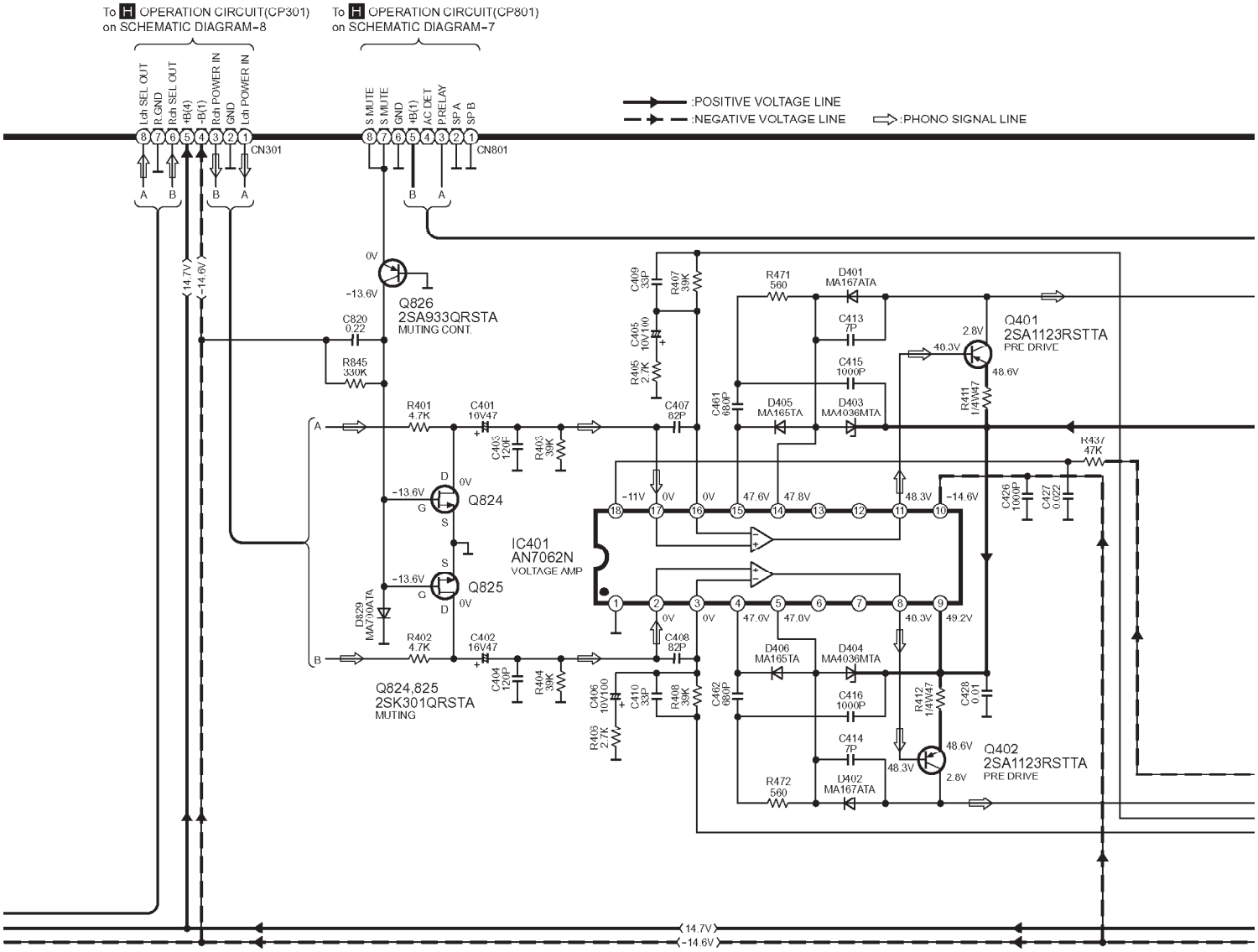
MA4036MTA
MA4056MTA
MA4068LTA

SCHEMATIC DIAGRAM-1

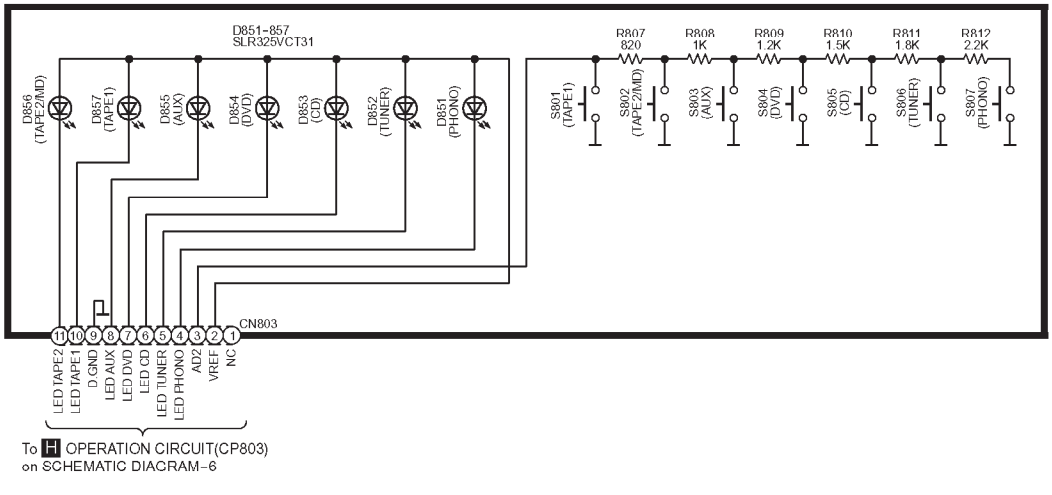
Note: The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.



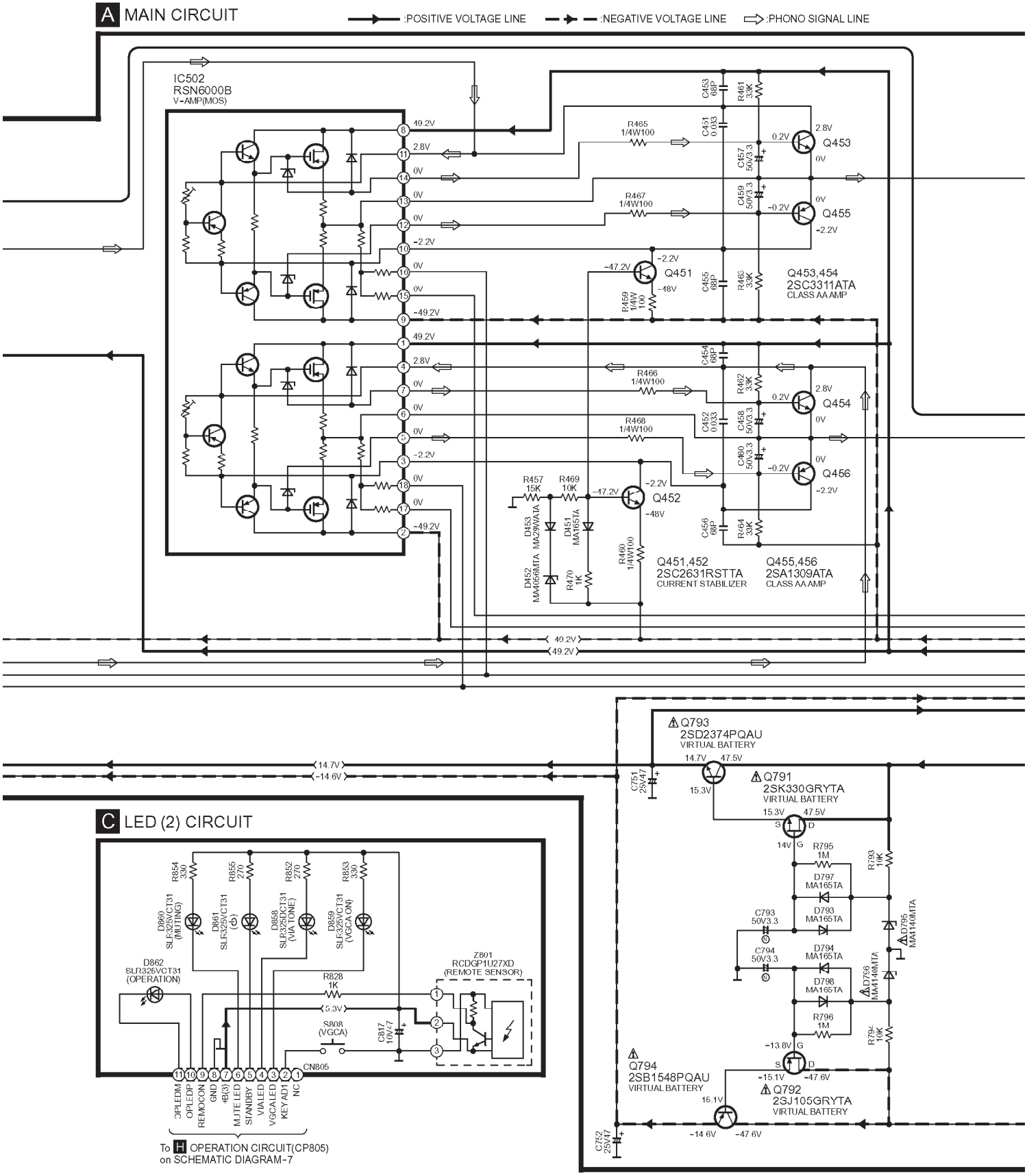
SCHEMATIC DIAGRAM-2



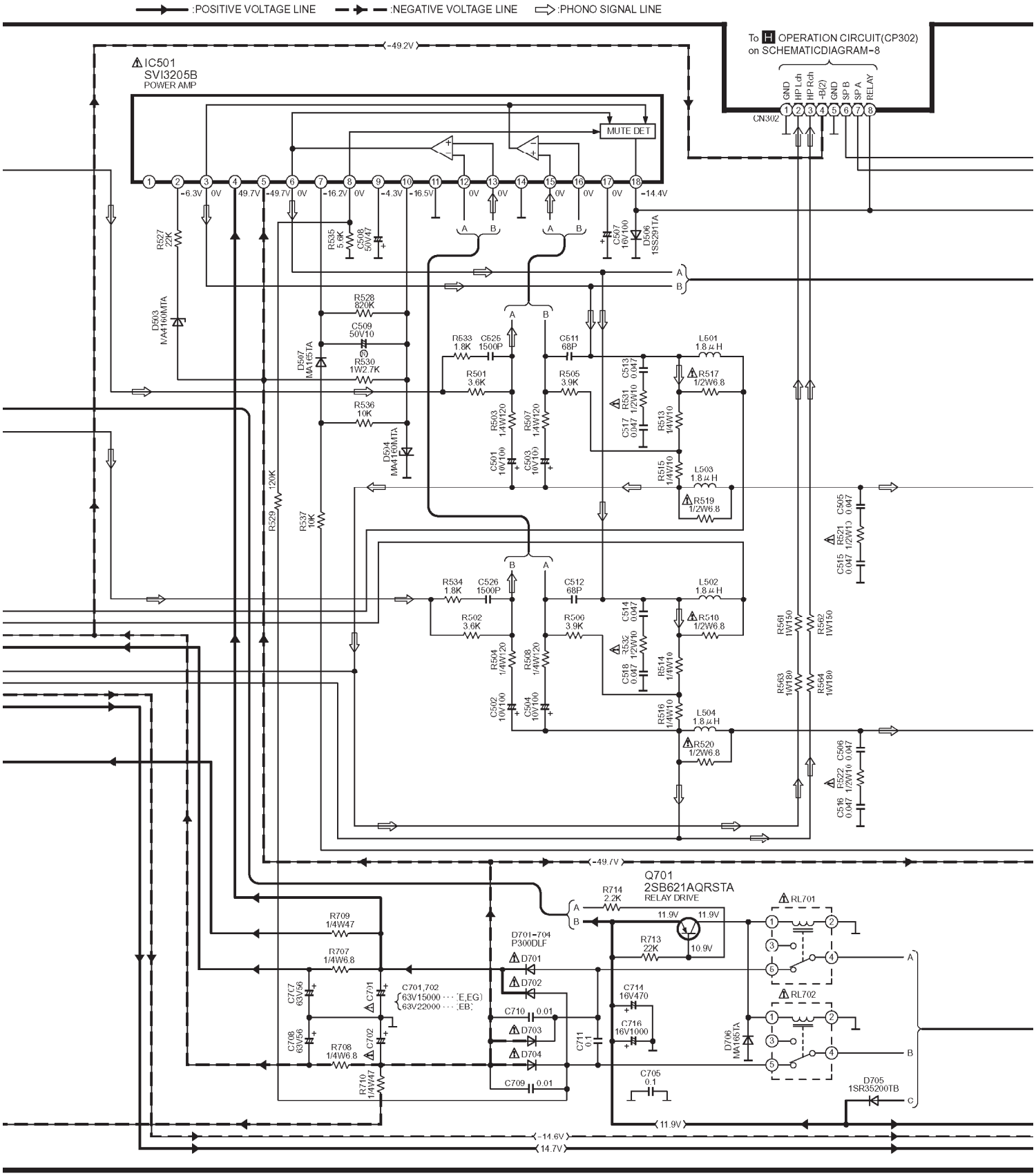
B LED (1) CIRCUIT

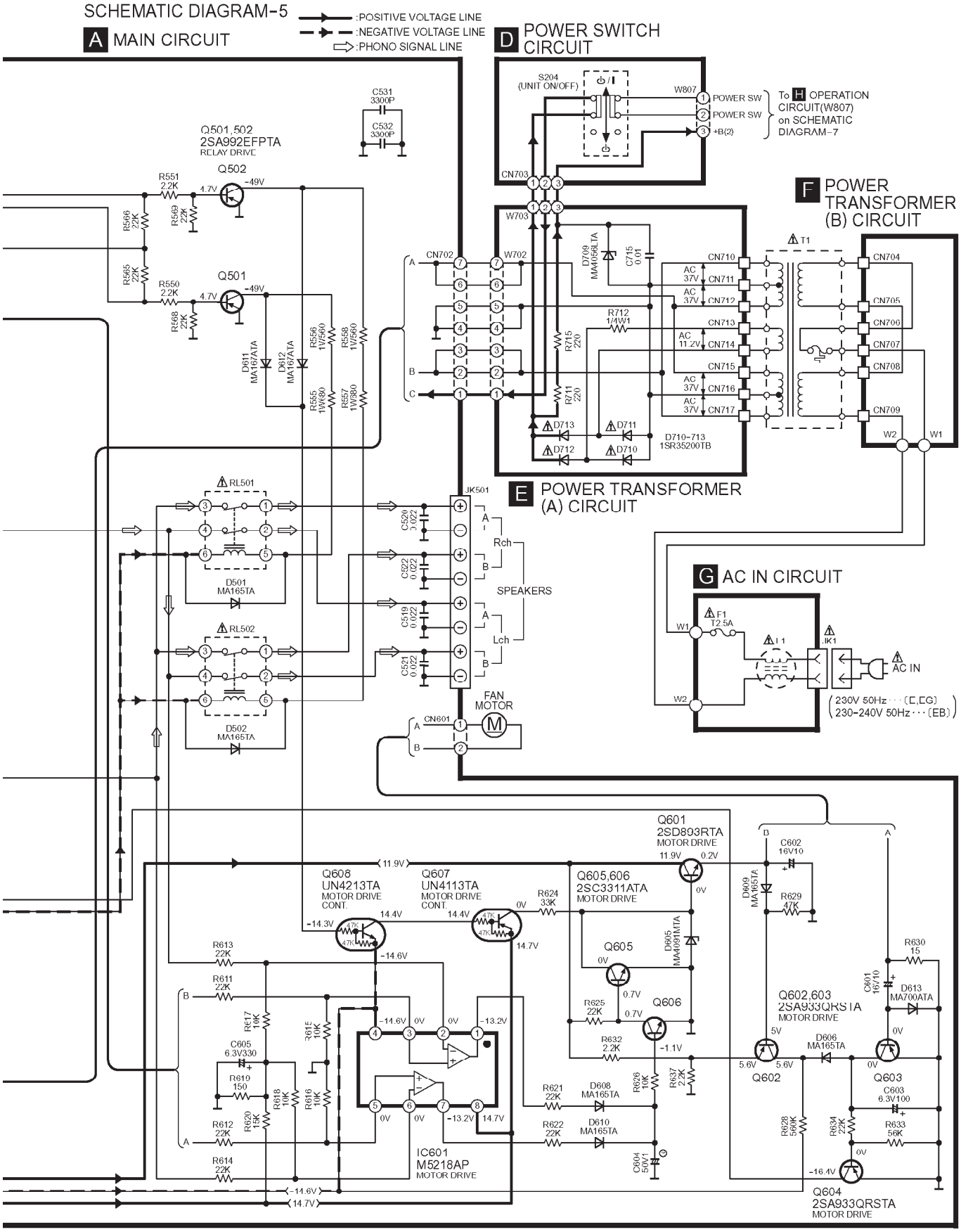


SCHEMATIC DIAGRAM-3



SCHEMATIC DIAGRAM-4

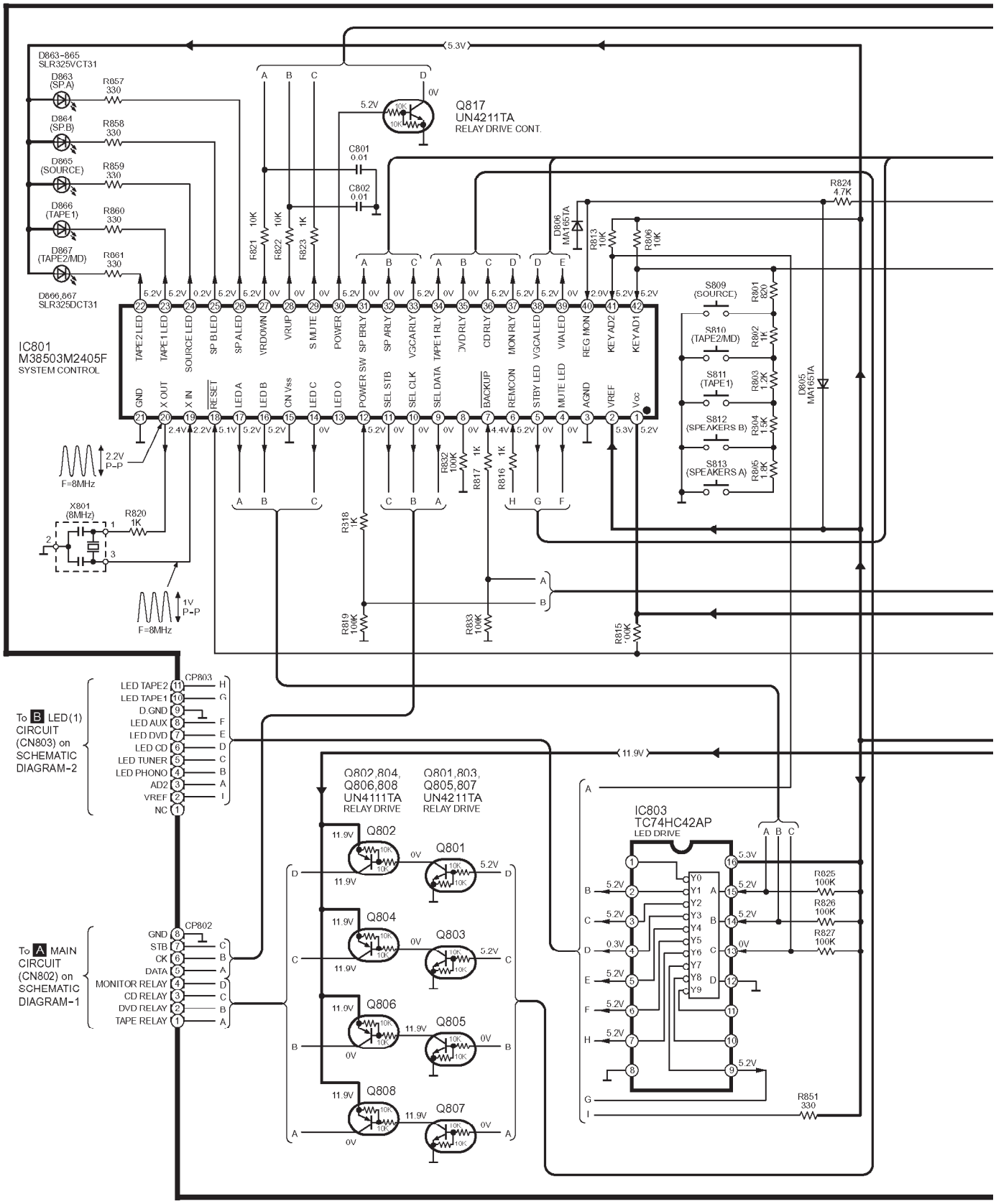



SCHEMATIC DIAGRAM-5
A MAIN CIRCUIT
:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:PHONO SIGNAL LINE
D POWER SWITCH CIRCUIT
S204 (UNIT ON/OFF)
W807
POWER SW
POWER SW
+B(2)
To H OPERATION CIRCUIT(W807) on SCHEMATIC DIAGRAM-7
F POWER TRANSFORMER (B) CIRCUIT
E POWER TRANSFORMER (A) CIRCUIT
G AC IN CIRCUIT
Q501,502
2SA992EFPTA
RELAY DRIVE
Q502
Q501
C531 3300P
C532 3300P
CN703
CN702
W703
W702
D709 MA4056LTA
C715 0.01
R712 1/4W1
R715 220
R711 220
D713
D711
D712
D710
D710~713 1SR35200TB
CN710
CN711
CN712
CN713
CN714
CN715
CN716
CN717
AC 37V
AC 11.2V
T1
CN704
CN705
CN706
CN707
CN708
CN709
W2
W1
D611 MA167ATA
D612 MA167ATA
R556 1W/560
R558 1W/560
R555 1W/680
R557 1W/680
RL501
RL502
D501 MA165TA
D502 MA165TA
JK501
C520 0.022
C522 0.022
C519 0.022
C521 0.022
Rch
Lch
SPEAKERS
FAN MOTOR
CN601
F1 T2.5A
I 1
JK1
AC IN
230V 50Hz ··· (E,EG)
230-240V 50Hz ··· (EB)
Q601
2SD893RTA
MOTOR DRIVE
Q608
UN4213TA
MOTOR DRIVE CONT.
Q607
UN4113TA
MOTOR DRIVE CONT.
Q605,606
2SC3311ATA
MOTOR DRIVE
Q605
Q606
D605 MA4091MTA
R624 33K
R625 22K
R632 2.2K
R626 10K
R637 2.2K
R621 22K
R622 22K
D608 MA165TA
D610 MA165TA
C604 50V1
IC601
M5218AP
MOTOR DRIVE
C602 16V10
D609 MA165TA
R629 47K
Q602,603
2SA933QRSTA
MOTOR DRIVE
Q602
Q603
D606 MA165TA
C601 16V10
R630 15
D613 MA700ATA
C603 6.3V100
R628 560K
R634 22K
R633 56K
Q604
2SA933QRSTA
MOTOR DRIVE
R613 22K
R611 22K
R617 10K
R615 10K
C605 6.3V330
R610 150
R618 10K
R616 10K
R620 15K
R612 22K
R614 22K

SCHEMATIC DIAGRAM-6

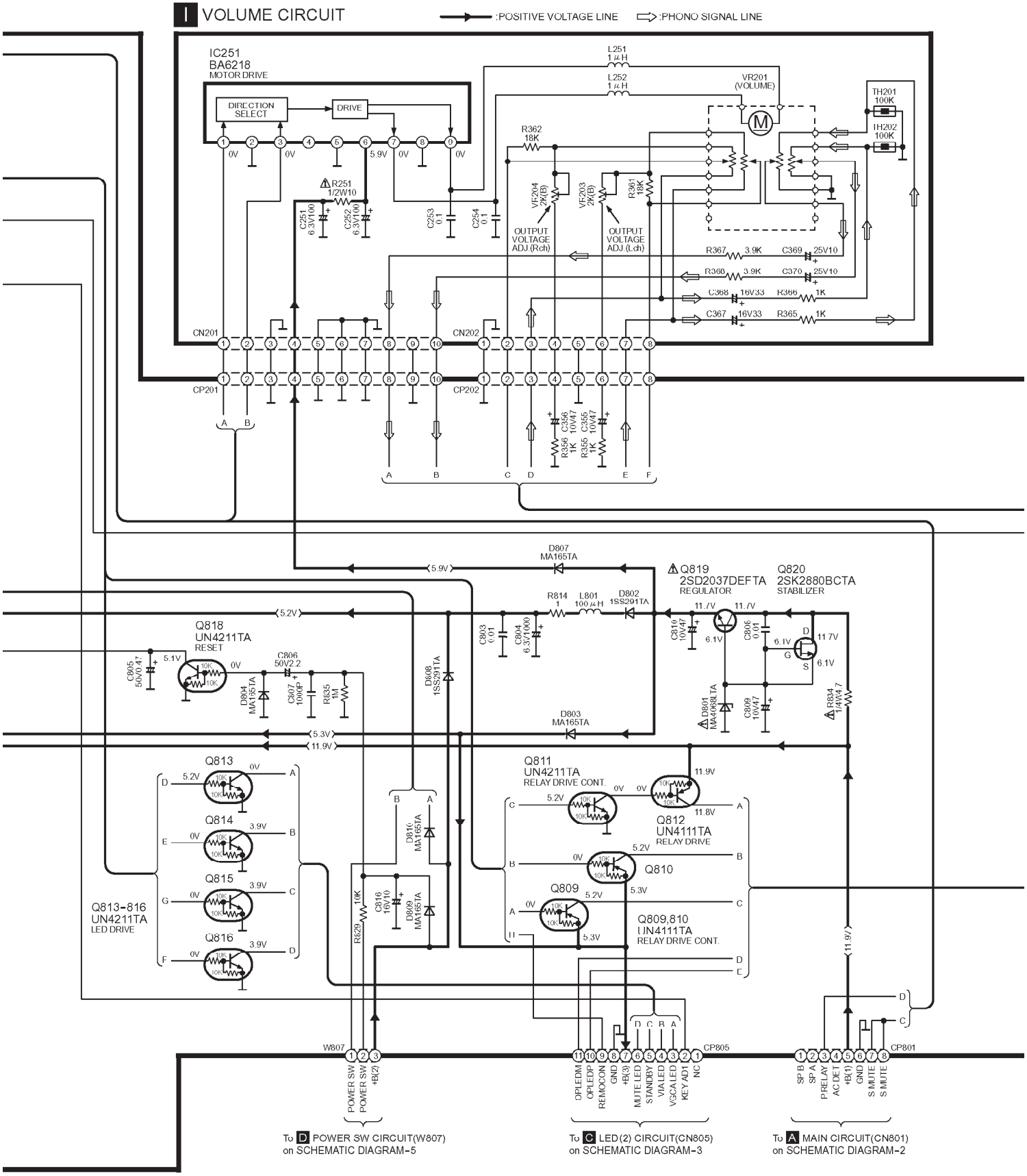
H OPERATION CIRCUIT

:POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-7

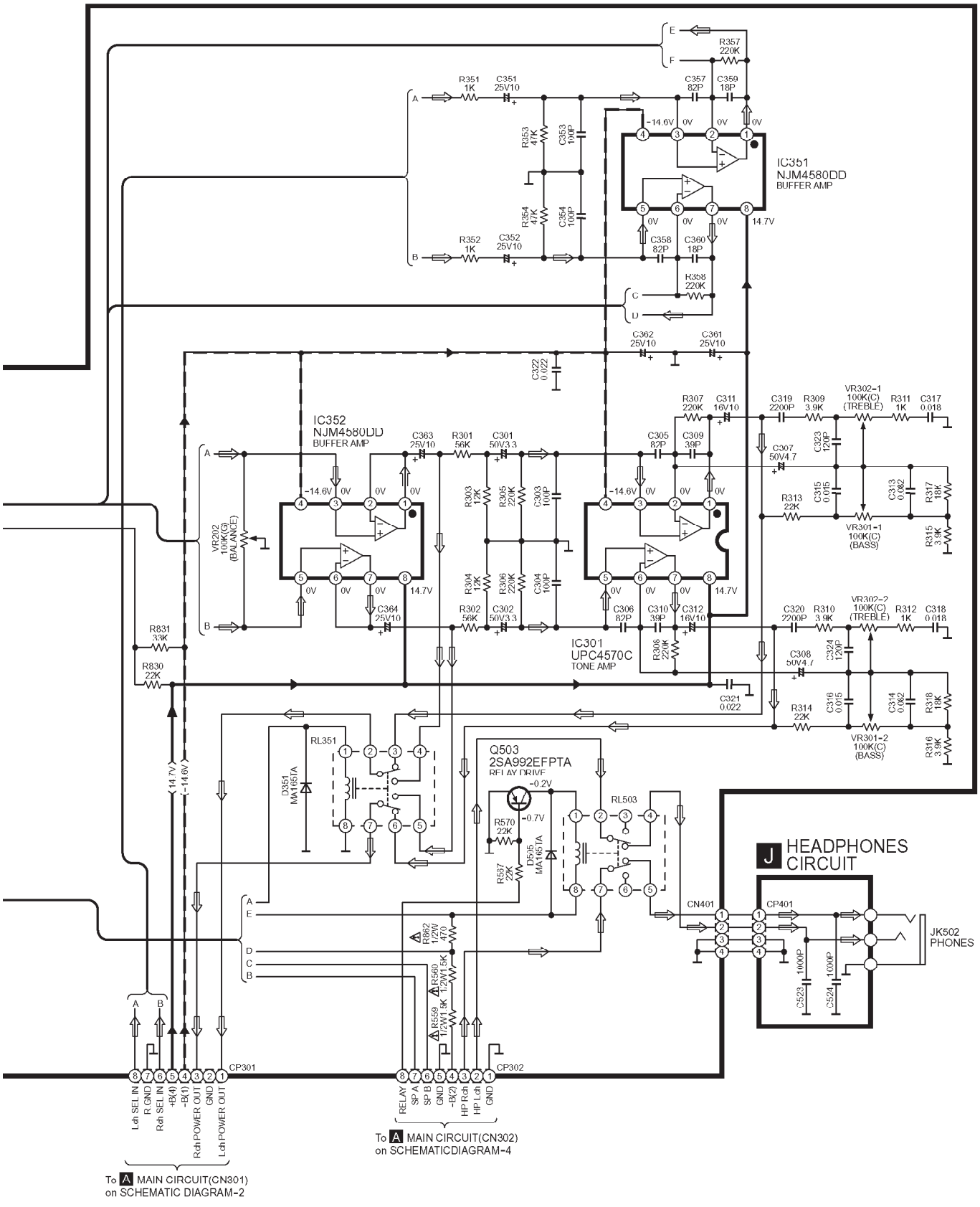
I VOLUME CIRCUIT

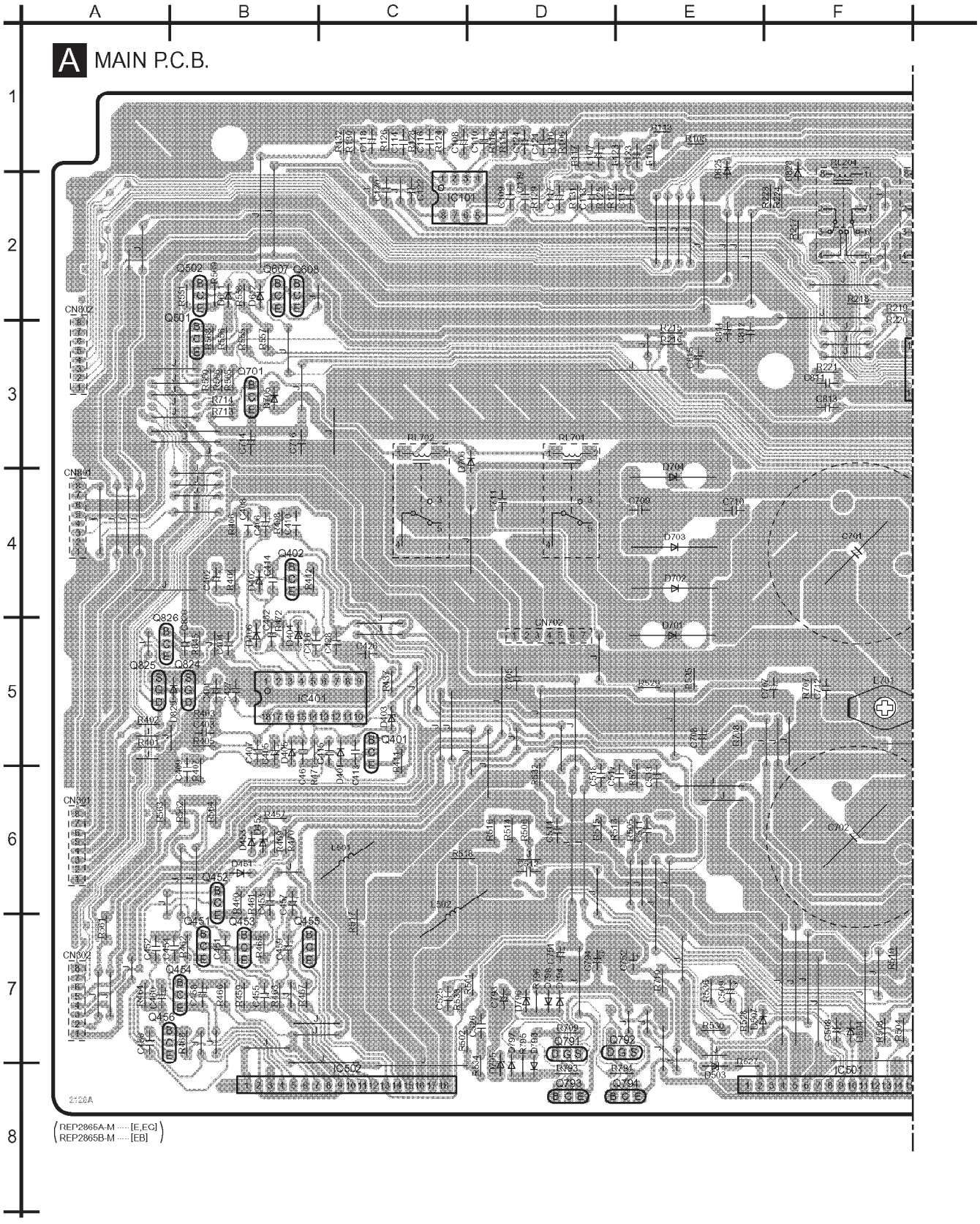


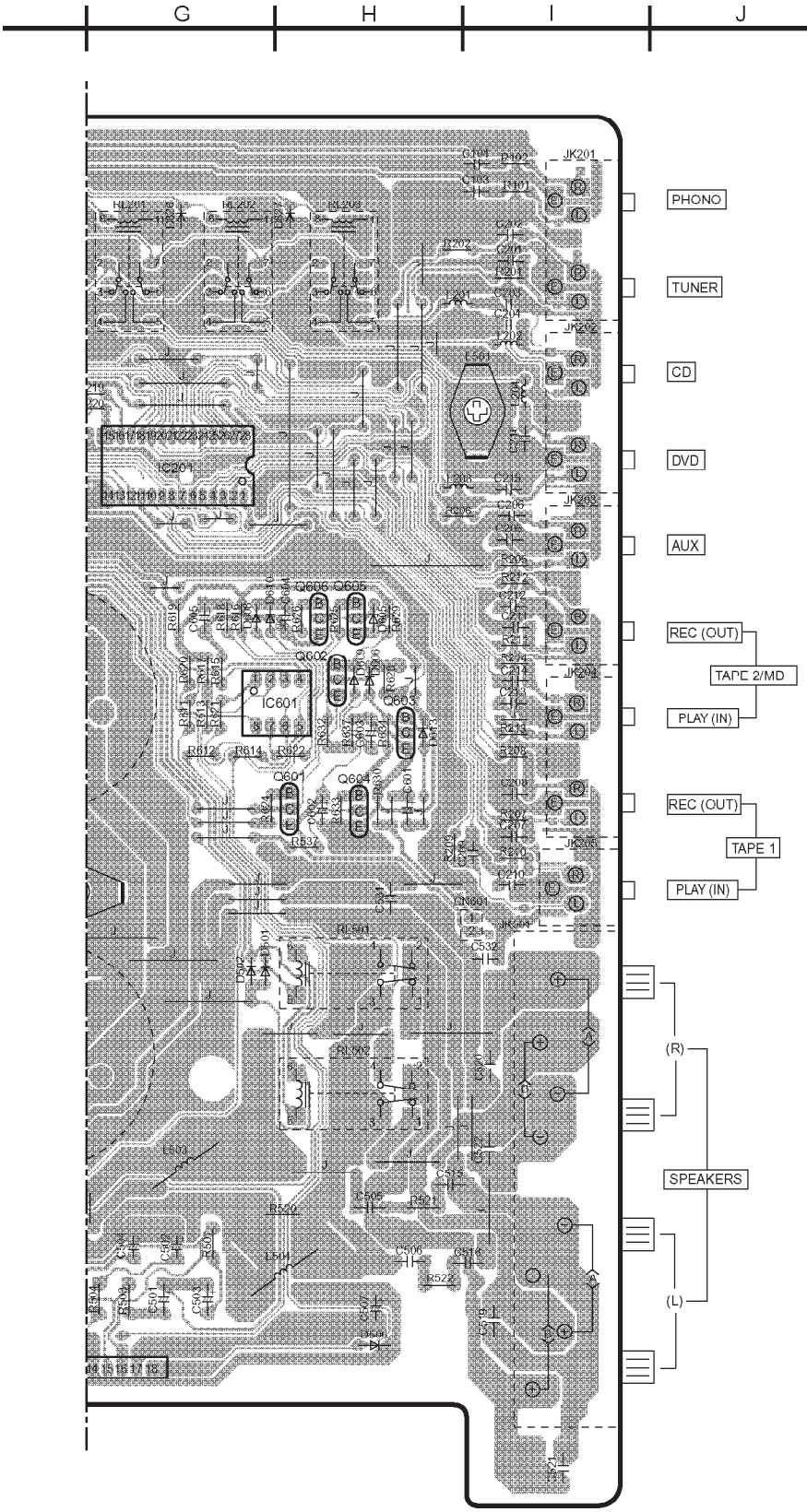
SCHEMATIC DIAGRAM-8

H OPERATION CIRCUIT

:POSITIVE VOLTAGE LINE
:NEGATIVE VOLTAGE LINE
:PHONO SIGNAL LINE



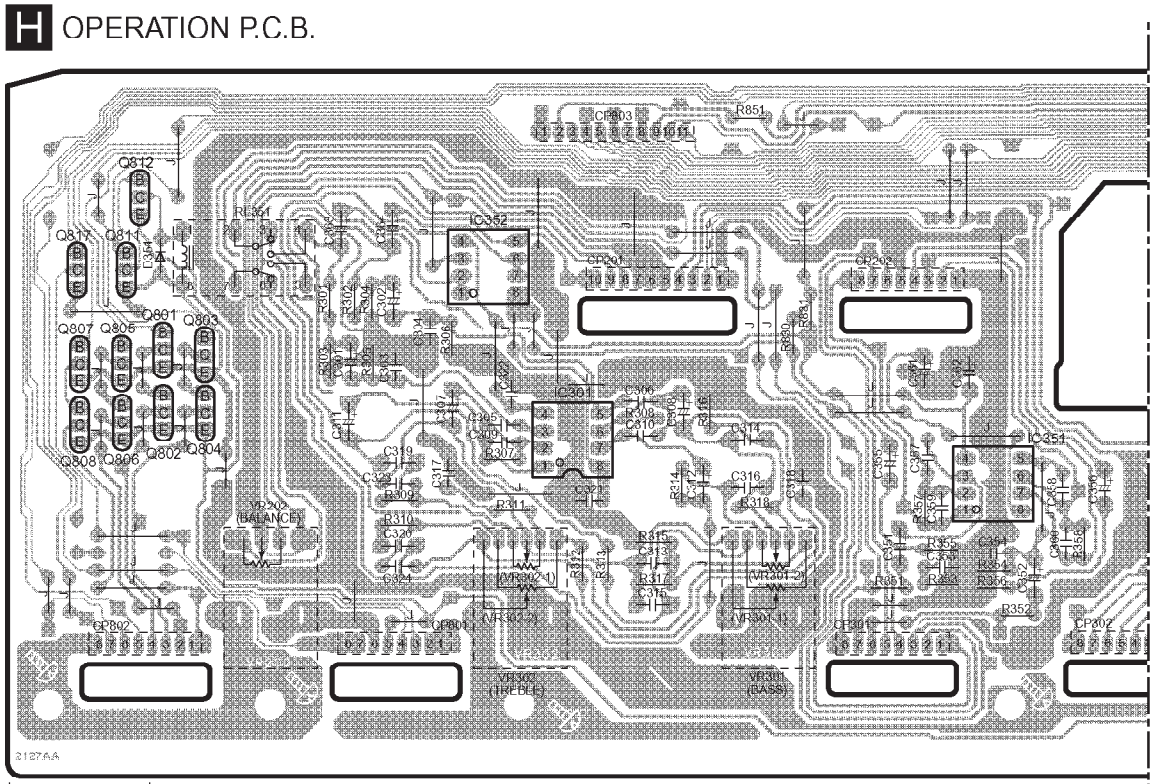

A
B
C
D
E
F
1
2
3
4
5
6
7
8
A MAIN P.C.B.
IC101
IC401
IC502
IC503
Q501
Q502
Q607
Q608
Q701
Q402
Q826
Q825
Q824
Q401
Q451
Q452
Q453
Q455
Q454
Q456
Q791
Q792
Q793
Q794
D700
D703
D702
D701
D791
D792
CN802
CN801
CN702
CN502
L502
L503
U701
U601
REP2865A-M ····· [E,EC]
REP2865B-M ····· [EB]



■ELECTRICAL PARTS LOCATION

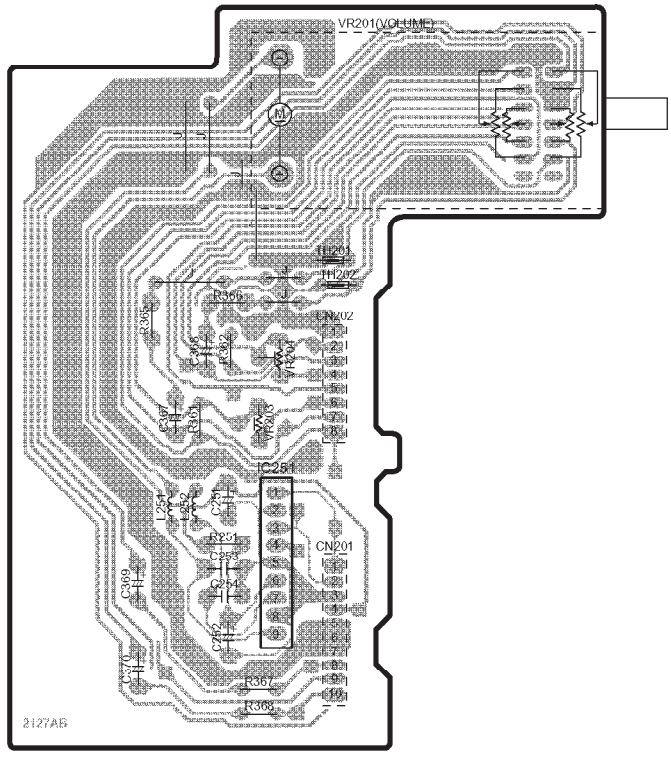
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
A MAIN P.C.B.							
IC101	2C	CN601	5I	R516	6D	C208	5I
IC201	3G	CN702	5D	R517	7C	C209	5I
IC401	5B	CN801	4A	R518	6C	C210	5I
IC501	8F	CN802	3A	R519	7F	C211	4I
IC502	8C	JK201	2I	R520	7H	C212	4I
IC601	4H	JK202	3I	R521	7H	C213	4I
Q401	5C	JK203	3I	R522	7H	C214	4I
Q402	4B	JK204	4I	R527	8E	C215	3I
Q451	7B	JK205	5I	R528	7E	C216	3I
Q452	6B	JK501	6I	R529	5F	C401	5B
Q453	7B	E501	3I	R530	7E	C402	4B
Q454	7B	E701	5F	R531	6E	C403	5B
Q455	7B	R101	1I	R532	6D	C404	5B
Q456	7A	R102	1I	R533	7C	C405	5B
Q501	3B	R105	1E	R534	8D	C406	4B
Q502	2B	R106	1D	R535	5E	C407	5B
Q601	5H	R109	1E	R536	7E	C408	4B
Q602	4H	R110	1D	R537	5H	C409	6B
Q603	4H	R113	1E	R550	3B	C410	4B
Q604	5H	R114	1D	R551	2B	C413	5C
Q605	4H	R117	1D	R555	3B	C414	4B
Q606	4H	R118	1D	R556	3B	C415	5C
Q607	2B	R123	1E	R557	3B	C416	5B
Q608	2B	R124	1C	R558	2B	C426	5C
Q701	3B	R125	2D	R561	7A	C427	5B
Q791	7D	R126	1C	R562	6B	C428	5C
Q792	7E	R127	2E	R563	6A	C451	7D
Q793	8D	R128	1C	R564	6B	C452	7A
Q794	8E	R129	2D	R565	3B	C453	6B
Q824	5B	R130	1C	R566	3B	C454	7B
Q825	5A	R131	2D	R568	3B	C455	7B
Q826	5A	R132	1C	R569	2B	C456	7A
D401	5C	R201	2I	R611	4G	C457	6B
D402	4B	R202	2H	R612	4G	C458	7B
D403	5C	R205	3I	R613	4G	C459	7B
D404	5B	R206	3H	R614	4G	C460	7A
D405	5B	R207	5I	R615	4G	C461	5B
D406	5B	R208	4I	R616	4G	C462	5B
D406	5B	R209	5H	R617	4G	C501	7G
D451	6B	R210	5I	R618	4G	C502	7G
D452	6B	R211	4I	R619	4G	C503	7G
D453	6B	R212	3I	R620	4G	C504	7G
D501	6G	R213	4I	R621	4G	C505	7H
D502	6G	R214	4I	R622	4H	C506	7H
D503	8E	R215	3E	R624	5G	C507	7H
D504	7F	R216	3E	R625	4H	C508	7F
D506	8H	R217	2F	R626	4H	C509	7E
D507	7E	R218	2F	R628	4H	C511	6E
D605	4H	R219	2F	R629	4H	C512	6D
D606	4H	R220	3F	R630	5H	C513	6E
D608	4G	R221	3F	R632	4H	C514	6D
D609	4H	R223	2F	R633	5H	C515	7H
D610	4G	R224	2F	R634	4H	C516	7I
D611	2B	R401	5A	R637	4H	C517	6E
D612	2B	R402	5A	R707	5F	C518	6D
D613	4H	R403	5B	R708	5E	C519	7I
D701	5E	R404	4B	R709	7D	C520	6I
D702	4E	R405	5B	R710	7E	C521	8I
D703	4E	R406	4B	R713	3B	C522	6I
D704	4E	R407	6B	R714	3B	C525	7C
D705	3B	R408	4B	R793	8D	C526	7D
D706	3D	R411	5C	R794	8E	C531	5H
D793	8D	R412	4B	R795	8D	C532	5I
D794	7D	R437	5C	R796	7D	C601	5H
D795	8D	R457	6B	R845	5B	C602	5H
D796	7D	R459	7D	C103	1I	C603	4H
D797	8D	R460	6B	C104	1I	C604	4H
D798	7D	R461	5B	C107	1D	C605	4G
D825	1E	R462	7B	C108	1C	C701	4F
D826	2G	R463	7B	C109	2D	C702	6F
D827	2H	R464	7A	C110	1D	C705	5D
D828	2F	R465	7B	C113	2D	C707	5F
L201	2H	R466	7B	C114	1C	C708	5E
L202	2I	R467	7B	C115	2E	C709	4E
L203	3H	R468	7B	C116	1C	C710	4E
L204	2I	R469	6B	C117	2D	C711	4D
L501	6C	R470	6B	C118	1C	C712	5F
L502	7C	R471	6B	C119	2D	C714	3B
L503	7G	R472	5B	C120	2C	C716	3B
L504	7H	R501	7D	C121	1D	C751	7D
RL201	2G	R502	7C	C122	2C	C752	7E
RL202	2G	R503	7G	C123	1E	C793	7D
RL203	2H	R504	7F	C124	1D	C794	7D
RL204	2F	R505	6E	C201	2I	C811	3F
RL501	6H	R506	6D	C202	2I	C812	3E
RL502	6H	R507	7G	C203	2I	C813	3F
RL701	4D	R508	7F	C204	2I	C814	3E
RL702	4C	R513	6E	C205	3I	C815	3E
CN301	6A	R514	6D	C206	3I	C820	5B
CN302	7A	R515	6D	C207	5I		

H OPERATION P.C.B.

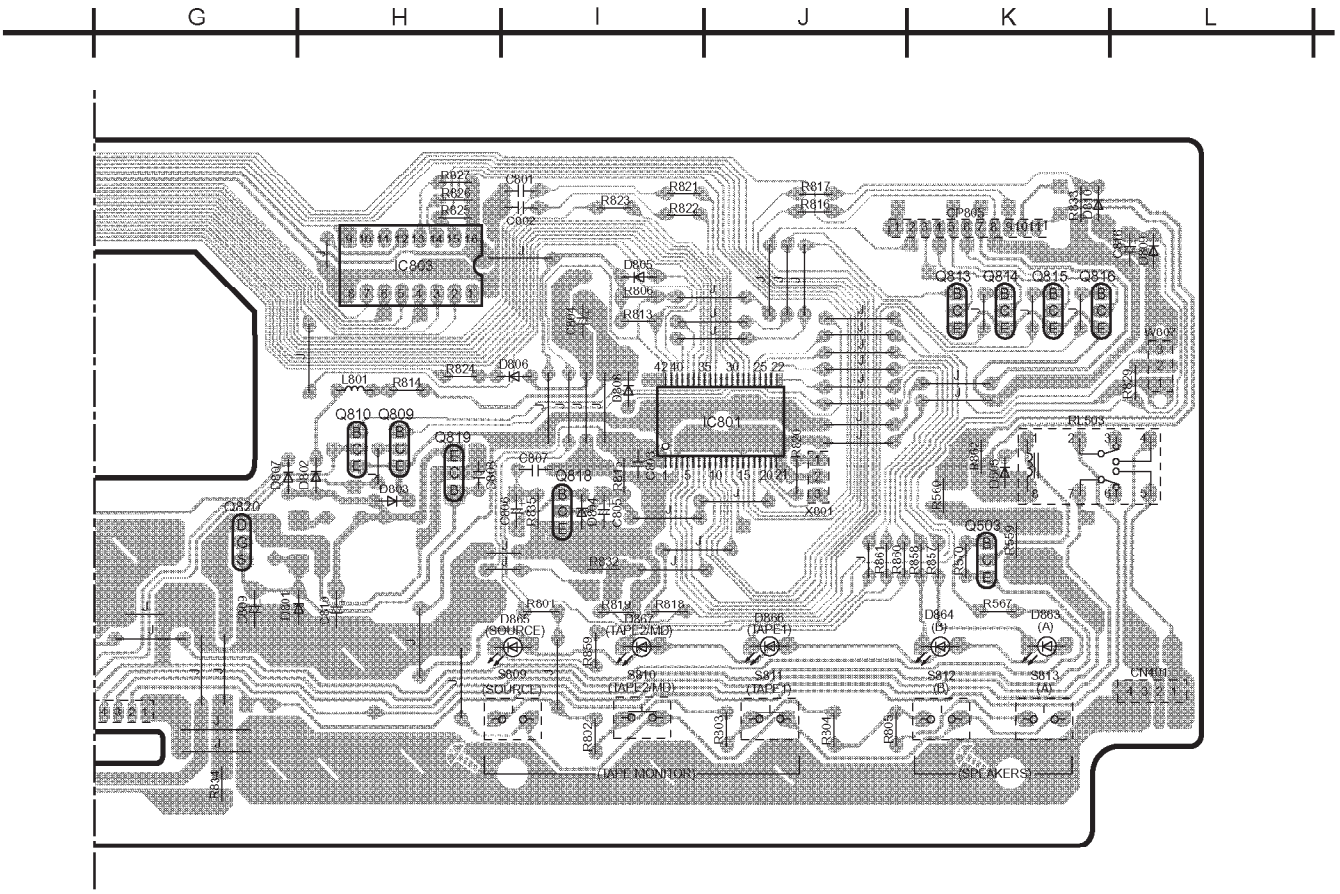


(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

I VOLUME P.C.B.



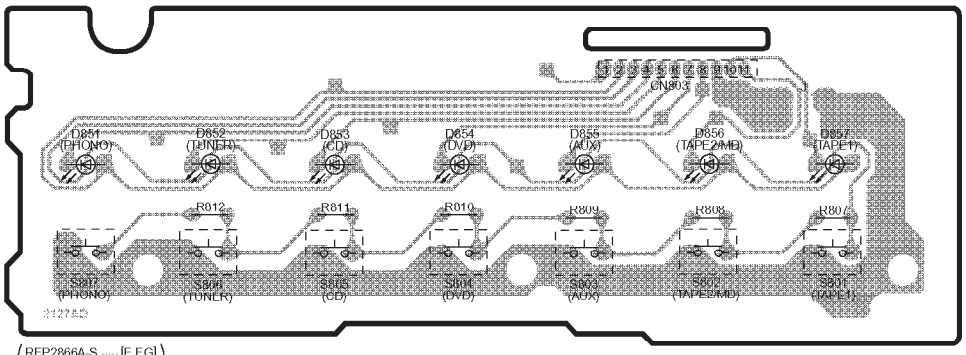
(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])



■ELECTRICAL PARTS LOCATION

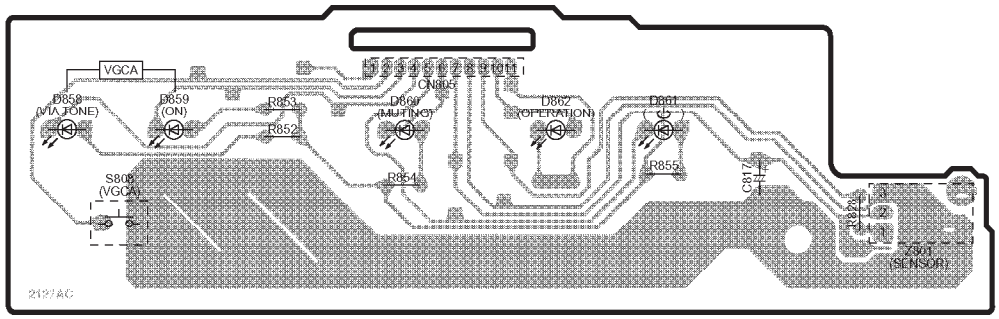
Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
H OPERATION P.C.B.													
IC301	3D	D851	2D	S813	4K	R314	3D	R816	1J	C301	2C	C353	3E
IC351	3F	D505	3K	RL351	2B	R315	3D	R817	1J	C302	2C	C354	3F
IC352	2C	D801	3H	RL503	3K	R316	3D	R818	3I	C303	2C	C355	3E
IC801	2J	D802	3H	CN401	4L	R317	4D	R819	3I	C304	2C	C356	3F
IC803	2H	D803	3H	CP201	2D	R318	3E	R820	3J	C305	3C	C357	3E
Q503	3K	D804	3I	CP202	2E	R351	4E	R821	1I	C306	3D	C358	3F
Q801	2B	D805	2I	CP301	4E	R352	4F	R822	1I	C307	3C	C359	3E
Q802	3B	D806	2I	CP302	4F	R353	3E	R823	1I	C308	3D	C360	3F
Q803	2B	D807	3G	CP801	4C	R354	3F	R824	2H	C309	3C	C361	3E
Q804	3B	D808	2I	CP802	4B	R355	3E	R825	1H	C310	3D	C362	3F
Q805	2A	D809	2L	CP803	1D	R356	4F	R826	1H	C311	3C	C363	2C
Q806	3A	D810	1K	CP805	1K	R357	3E	R827	1H	C312	3D	C364	2C
Q807	2A	D863	4K	W807	2L	R358	3F	R829	2L	C313	3D	C801	1I
Q808	3A	D864	4K	R301	2B	R559	3K	R830	2E	C314	3E	C802	1I
Q809	3H	D865	4I	R302	2C	R560	3K	R831	2E	C315	4D	C803	3I
Q810	3H	D866	4J	R303	2B	R567	3K	R832	3I	C316	3E	C804	2I
Q811	2A	D867	4I	R304	2C	R570	3K	R833	1K	C317	3C	C805	3I
Q812	2B	VR202	4B	R305	2C	R801	3I	R834	4G	C318	3E	C806	3I
Q813	2K	VR301	4E	R306	2C	R802	4I	R835	3I	C319	3C	C807	3I
Q814	2K	VR302	4C	R307	3C	R803	4J	R851	1E	C320	3C	C808	3H
Q815	2K	L801	2H	R308	3D	R804	4J	R857	3K	C321	3D	C809	3G
Q816	2K	X801	3J	R309	3C	R805	4J	R858	3K	C322	3C	C810	3H
Q817	2A	S809	4I	R310	3C	R806	2I	R859	4I	C323	3C	C816	2I
Q818	3I	S810	4I	R311	3C	R813	2I	R860	3J	C324	3C		
Q819	3H	S811	4J	R312	3D	R814	2H	R861	3J	C351	3E		
Q820	3G	S812	4K	R313	3D	R815	3I	R862	3K	C352	4F		
I VOLUME P.C.B.													
IC251	7D	VR203	7D	CN201	8D	R362	6D	R368	8D	C254	8D	C370	8C
TH201	6D	VR204	7D	CN202	7D	R365	6C	C251	7D	C367	7C		
TH202	6D	L251	7C	R251	7D	R366	6D	C252	8D	C368	6C		
VR201	5D	L252	7C	R361	7C	R367	8D	C253	8D	C369	8C		

B LED(1) P.C.B.



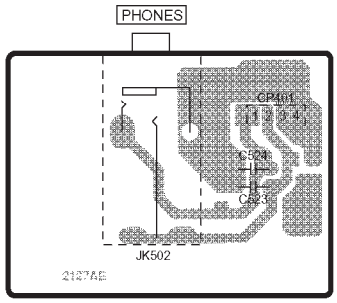
(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

C LED(2) P.C.B.



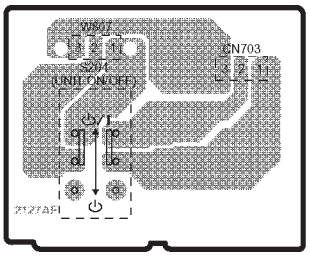
(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

J HEADPHONES P.C.B.



(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

D POWER SWITCH P.C.B.

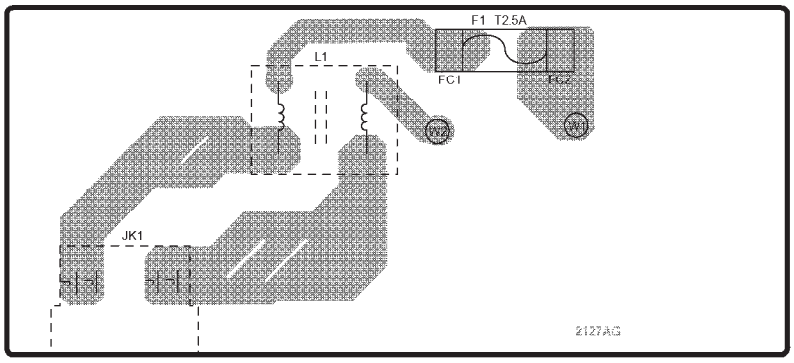


(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

■ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.
D LED(1) P.C.B.			
D851	2A	S805	2C
D852	2B	S806	2B
D853	2C	S807	2A
D854	2C	CN803	1D
D855	2D	R807	2E
D856	2E	R808	2E
D857	2E	R809	2D
S801	2E	R810	2C
S802	2E	R811	2C
S803	2D	R812	2B
S804	2C		
C LED(2) P.C.B.			
D858	4A	CN805	4C
D859	4B	R828	4E
D860	4C	R852	4B
D861	4D	R853	4B
D862	4D	R854	4C
Z801	4F	R855	4D
S808	4B	C817	4E
J HEADPHONES P.C.B.			
CP401	6B	C523	7B
JK502	6B	C524	6B
D POWER SWITCH P.C.B.			
S204	7D	W807	7D
CN703	7D		

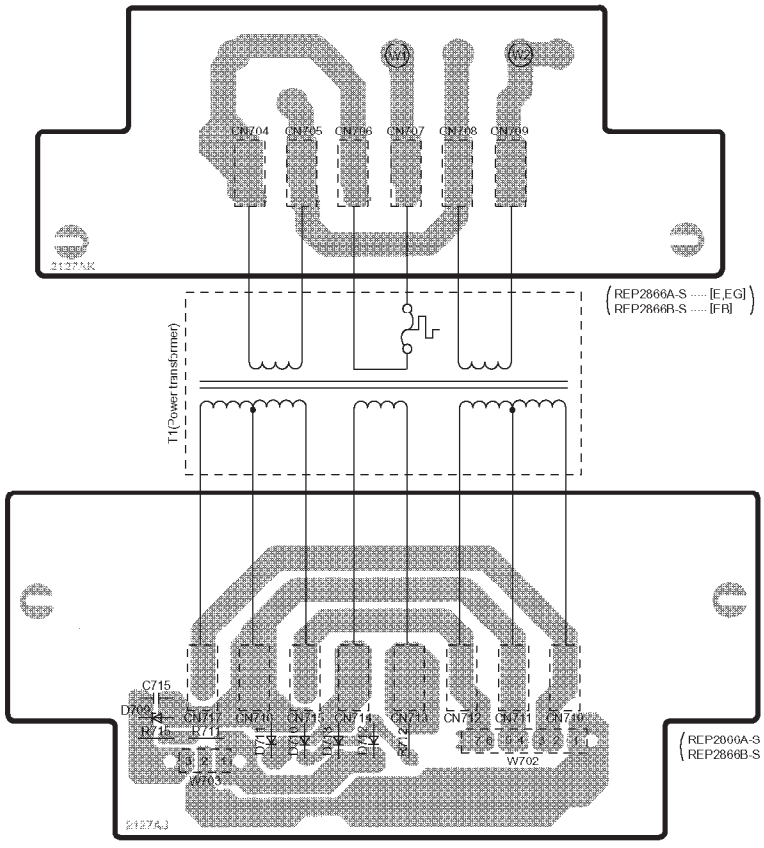
G AC IN P.C.B.



AC IN
(230V, 50Hz ..... [E,EG]
230-240V, 50Hz ..... [EB])

(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

F POWER TRANSFORMER (B) P.C.B.



(REP2866A-S ..... [E,EG]
REP2866B-S ..... [FB])

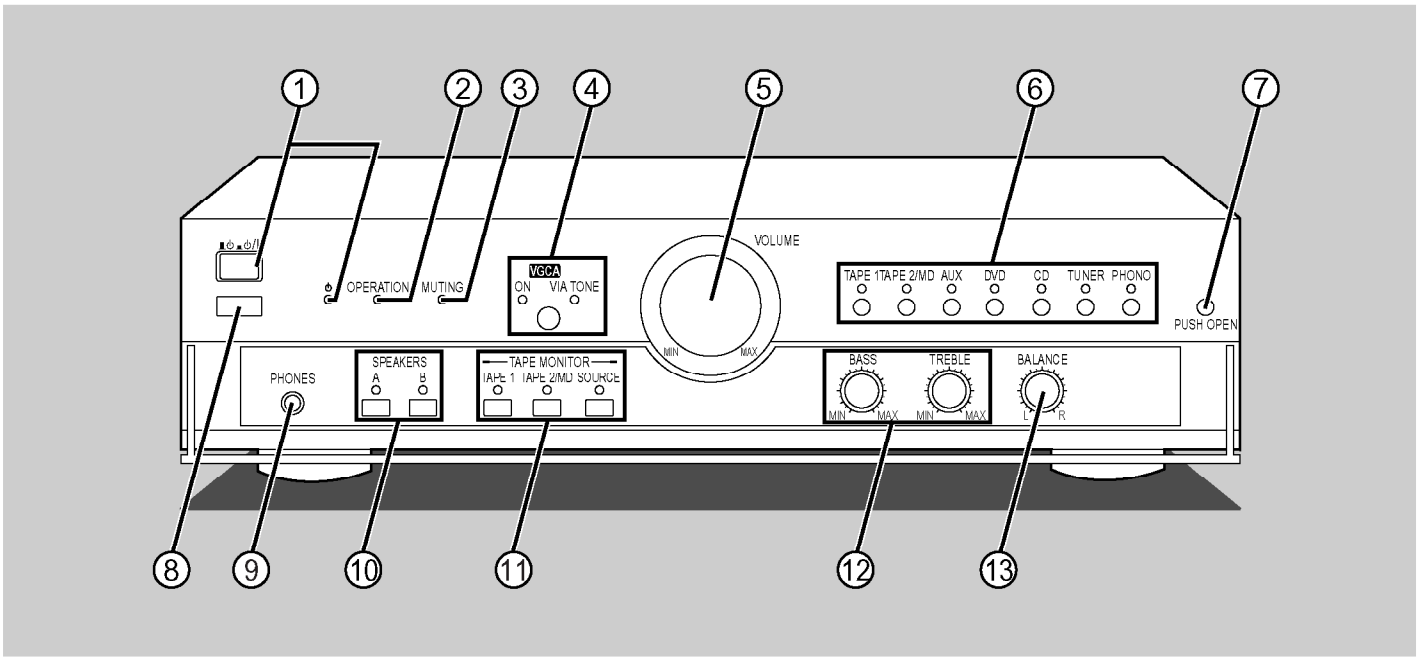
(REP2866A-S ..... [E,EG]
REP2866B-S ..... [EB])

E POWER TRANSFORMER (A) P.C.B.

■ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.
C AC IN P.C.B.			
L1	2C	JK1	2B
F1	1D	W1	2D
FC1	1D	W2	2D
FC2	1D		
E POWER TRANSFORMER (A) P.C.B.			
D709	7B	CN715	7B
D710	7B	CN716	7B
D711	7B	CN717	7B
D712	7C	W702	7C
D713	7B	W703	7B
CN710	7D	R711	7B
CN711	7C	R712	7C
CN712	7C	R715	7B
CN713	7C	C715	7B
CN714	7B		
F POWER TRANSFORMER (B) P.C.B.			
CN704	5B	CN708	5C
CN705	5B	CN709	5C
CN706	5B	W1	4C
CN707	5C	W2	4C

■ Front Panel Controls



Main unit

No.	Name

① Unit on/off button (⏻ /I) and remote standby indicator (⏻)

Use this button to turn the unit on and off.

- ▬ (off): The unit is in standby mode.
- ▬ (on): The unit is on. The unit can be turned on and off with the remote control. When the unit is turned off with the remote control it is in remote standby and the indicator lights.

The unit is still using a small amount of power in the standby and remote standby conditions. Standby uses less power.

② Operation indicator (OPERATION)

③ Muting indicator (MUTING)

④ VGCA button/indicators (VGCA)

No.	Name

⑤ Volume control (VOLUME)

⑥ Input select buttons/indicators

⑦ Panel button (PUSH OPEN)

Press to open the clear panel.
Close by hand.

⑧ Remote control signal sensor

⑨ Headphone jack (PHONES)

⑩ Speaker select buttons/indicators (SPEAKERS A, B)

⑪ Tape monitor buttons/indicators (TAPE MONITOR)

⑫ Tone contols (BASS, TREBLE)

⑬ Balance control (BALANCE)

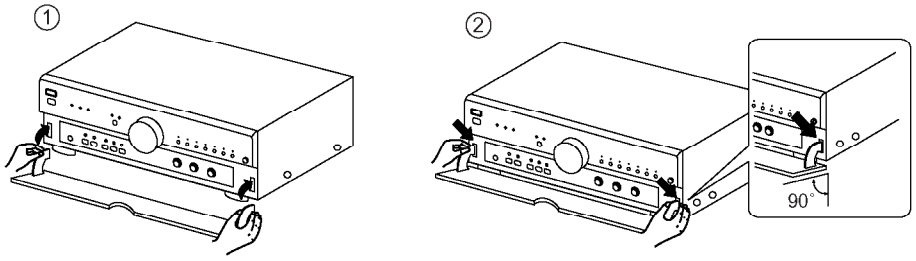
If the clear panel comes off

① Insert the panel as shown in the illustration.

② Ensure the panel is parallel to the unit, then press firmly down and in on the levers until they click into place.

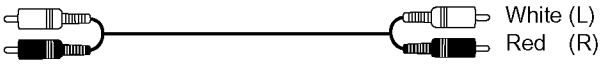
③ Check that the panel now moves correctly.

If it does not, remove it and repeat the above procedure.

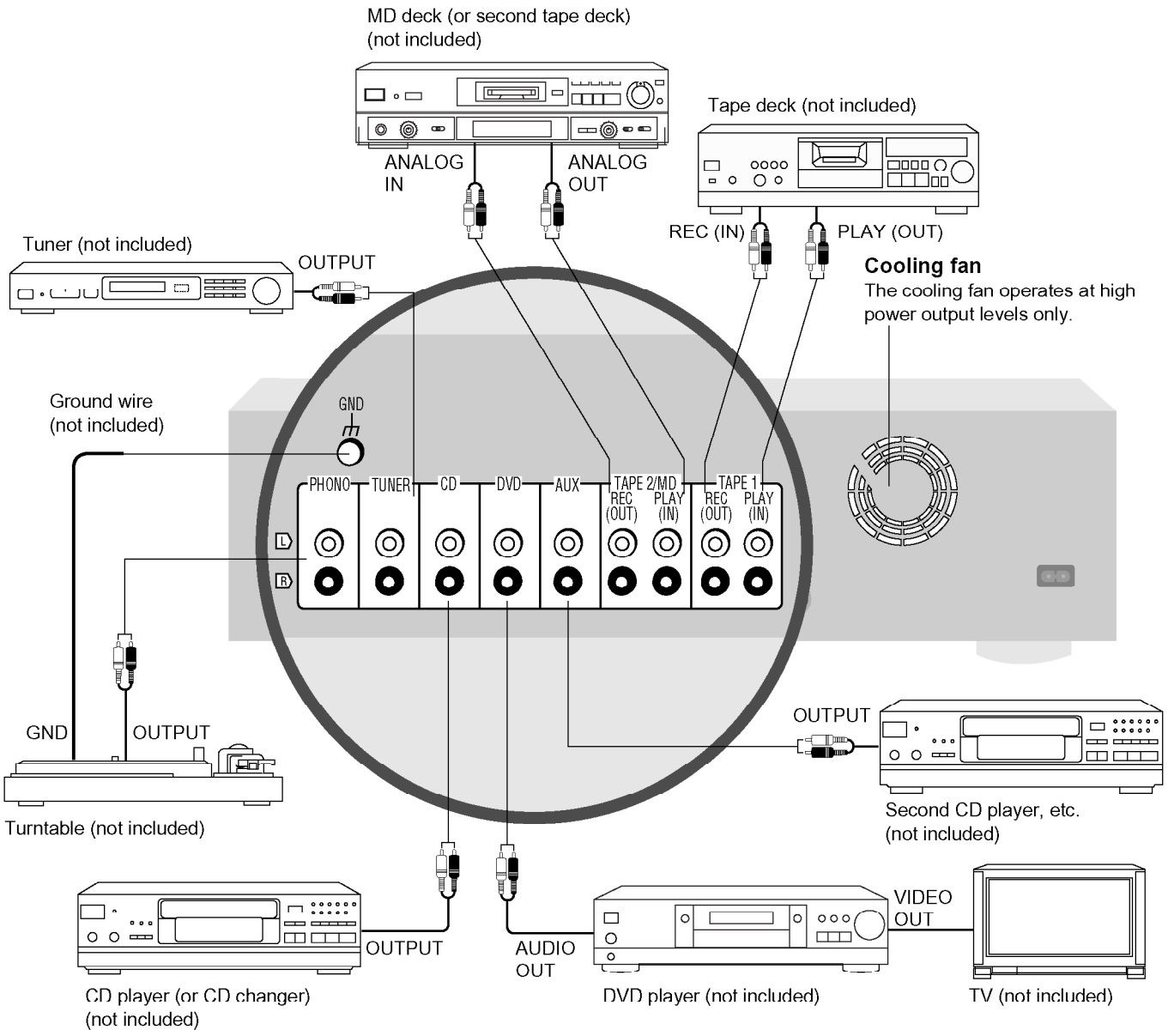


■ Connections

Stereo phono cable (not included)

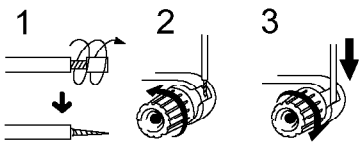


Connections to other equipment



Connecting the speakers

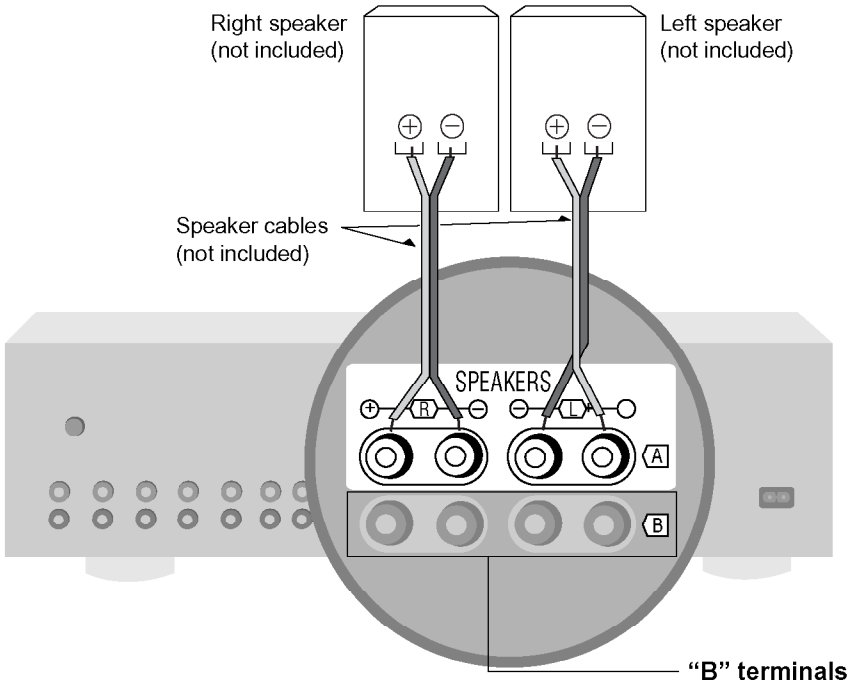
Connecting the speaker cables



NO

Caution

To prevent damage to circuitry, never short-circuit the positive (+) and negative (–) speaker wires.



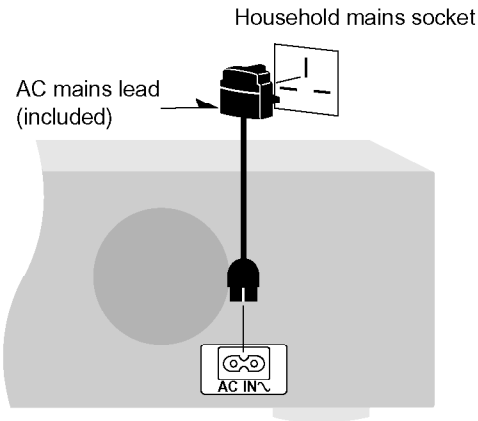
"B" terminals

For connection to a second pair of speakers.

Speaker impedance

When only the "A" or only the "B" terminals are used: 4–16 Ω
When the "A" and "B" terminals are used simultaneously: 8–16 Ω

Connecting the power supply

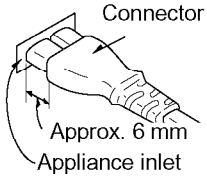


BE SURE TO READ THE CAUTION FOR THE AC MAINS LEAD BEFORE CONNECTION.

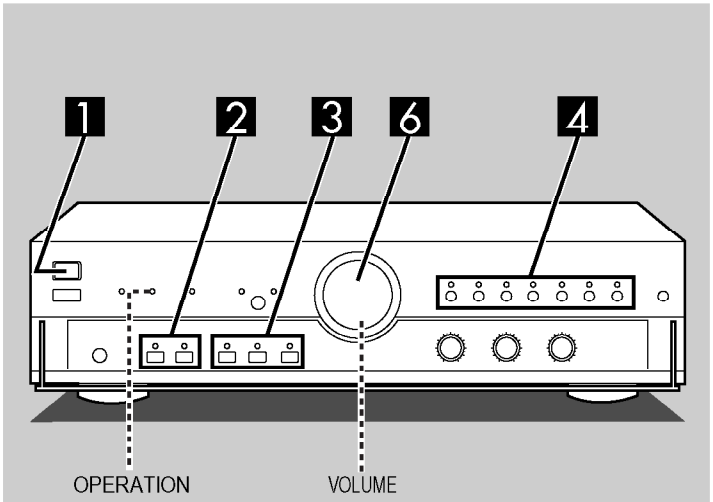
Connect the AC mains lead only after all other connections have been made.

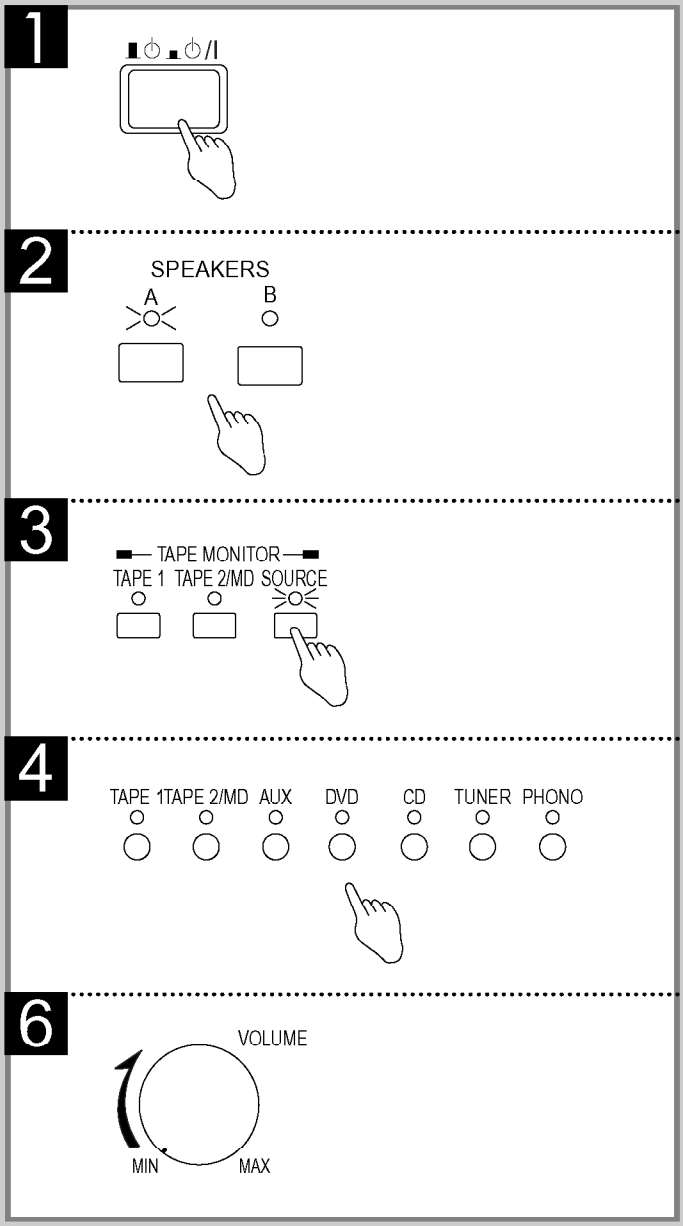
Insertion of connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.



■ Listening





Preparation

Before operation, set [VOLUME] to the "MIN" position.

1 **Press [⏻/I].**
About 4 seconds later, the "OPERATION" indicator will light up.

2 **Select the speakers to be used.**
The corresponding speaker indicator will illuminate.

3 **Press [SOURCE].**

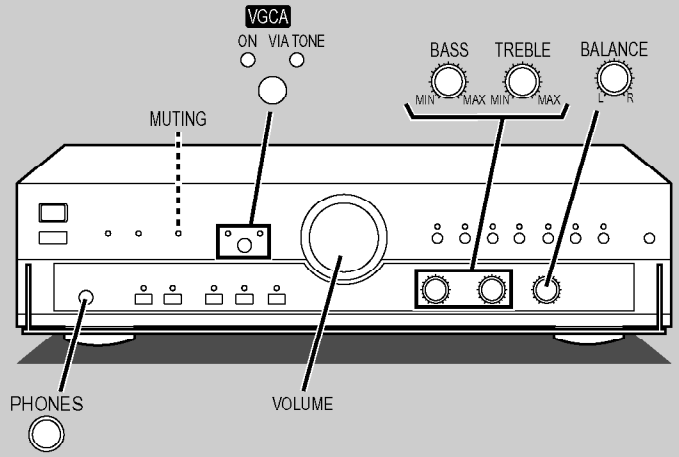
4 **Press input select buttons to select the desired source.**
The corresponding indicator lights.
TAPE 1: Tape deck
TAPE 2/MD: Second tape deck or MD deck
AUX: Component connected to the "AUX" terminals
DVD: DVD player
CD: CD player (or CD changer)
TUNER: Tuner
PHONO: Turntable

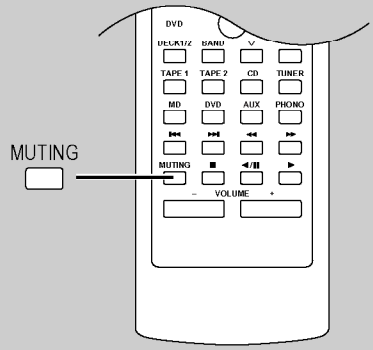
5 **Start the desired source.**
Refer to the appropriate operating instructions for details.

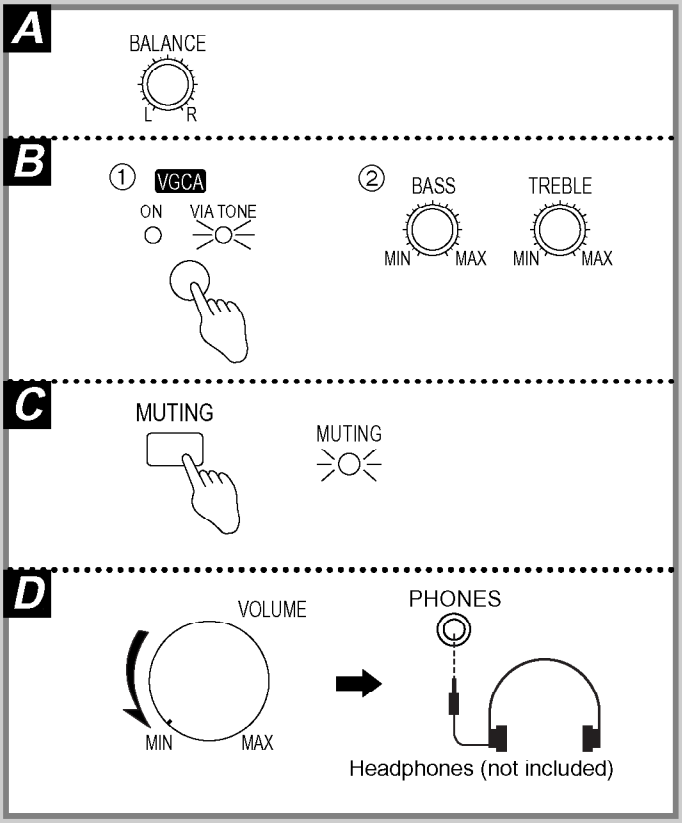
6 **Adjust the volume.**

After listening is finished

Be sure to reduce the volume level, and turn the unit off by pressing the unit on/off button.







To adjust the sound balance A

Turn [BALANCE] to adjust the left/right sound balance.

The VGCA circuit

This unit features a state-of-the-art variable gain control amplifier (VGCA).
Rather than reducing the volume of the input signal and then amplifying it as was done in the past, this unit uses the VGCA circuit to change the gain of the amplifier itself.
This has resulted in a 10 dB improvement on the S/N ratio of past models.
Leave VGCA on during normal use.
VGCA is switched on at the time of purchase.

To adjust the tone quality B

① Press [VGCA] to turn the "VIA TONE" indicator on.
② Turn [BASS] to adjust the low-frequency sound. Turn [TREBLE] to adjust the high-frequency sound.

Press again to turn VGCA on again. Sound is heard unadjusted.

To mute the sound level C

Remote control only

Press [MUTING].
The "MUTING" indicator on this unit will light up.

Press again to restore the volume indicated by the volume control.
The "MUTING" indicator will turn off.

Note
Muting is also canceled when the unit is turned off.

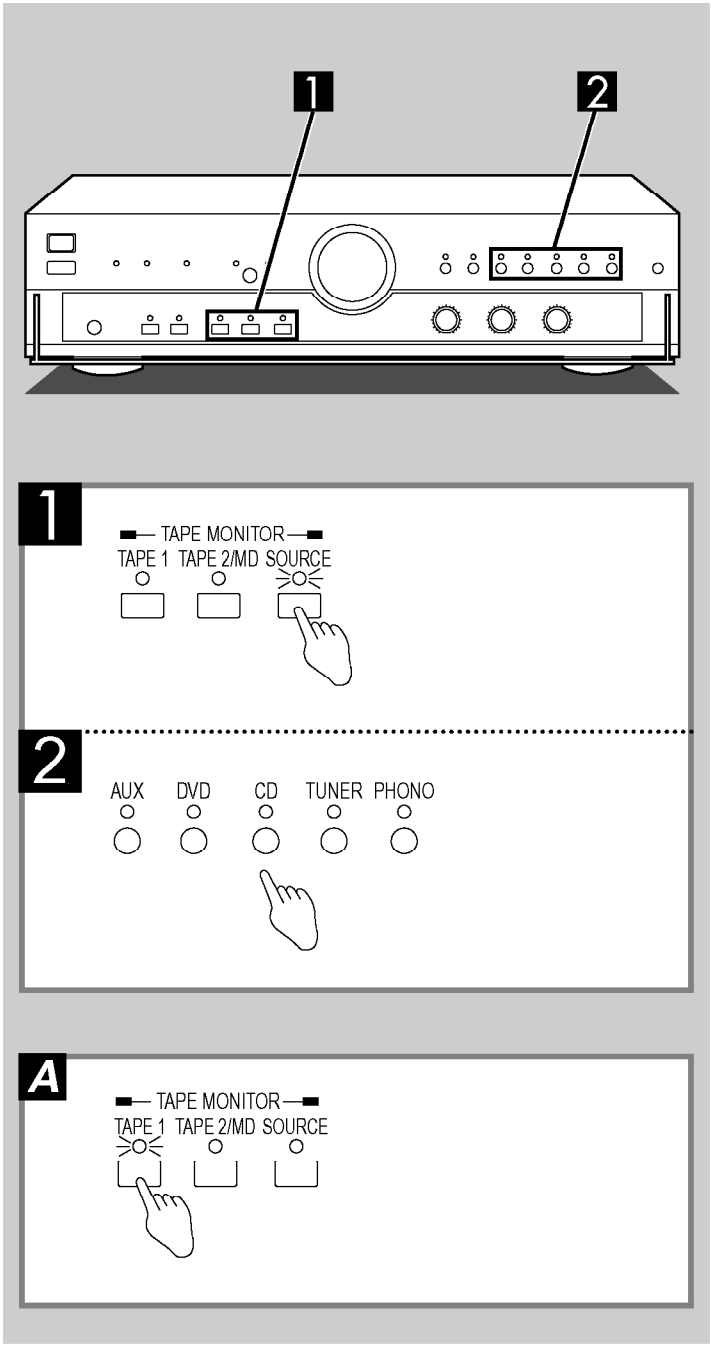
To listen through headphones D

Decrease the volume, and connect the headphones.
Plug type: 6.3 mm stereo

If sound from speakers is not wanted, press SPEAKER [A] and/or [B] to turn off the speaker indicators.

Note
Avoid listening for prolonged periods of time to prevent hearing damage.

■ Recording



Connect the tape deck or MD deck to either of the "REC (OUT) (TAPE 1 or TAPE 2/MD)" terminals on the back of the unit.

1 **Press [SOURCE].**

2 **Press on input select button to select the source to be recorded.**

AUX: Equipment connected to the AUX terminal.
DVD: DVD player
CD: CD player (or CD changer)
TUNER: Tuner
PHONO: Turntable

3 **Begin recording on tape deck or MD deck.**

Follow your equipment's operating instructions.

4 **Begin the source to be recorded.**

Note

Some DVD players need special settings before recording. See the DVD player's operating instructions for details.

Recording between TAPE 1 and TAPE 2/MD

You can record from TAPE 1 to TAPE 2/MD and vice versa.

From TAPE 1 to TAPE 2/MD

① Press [SOURCE].
② Press input select buttons [TAPE 1].
③ Start recording on the recording deck and playback on the playback deck.

From TAPE 2/MD to TAPE 1

In step ②, press input select buttons [TAPE 2/MD].

To check a recording A

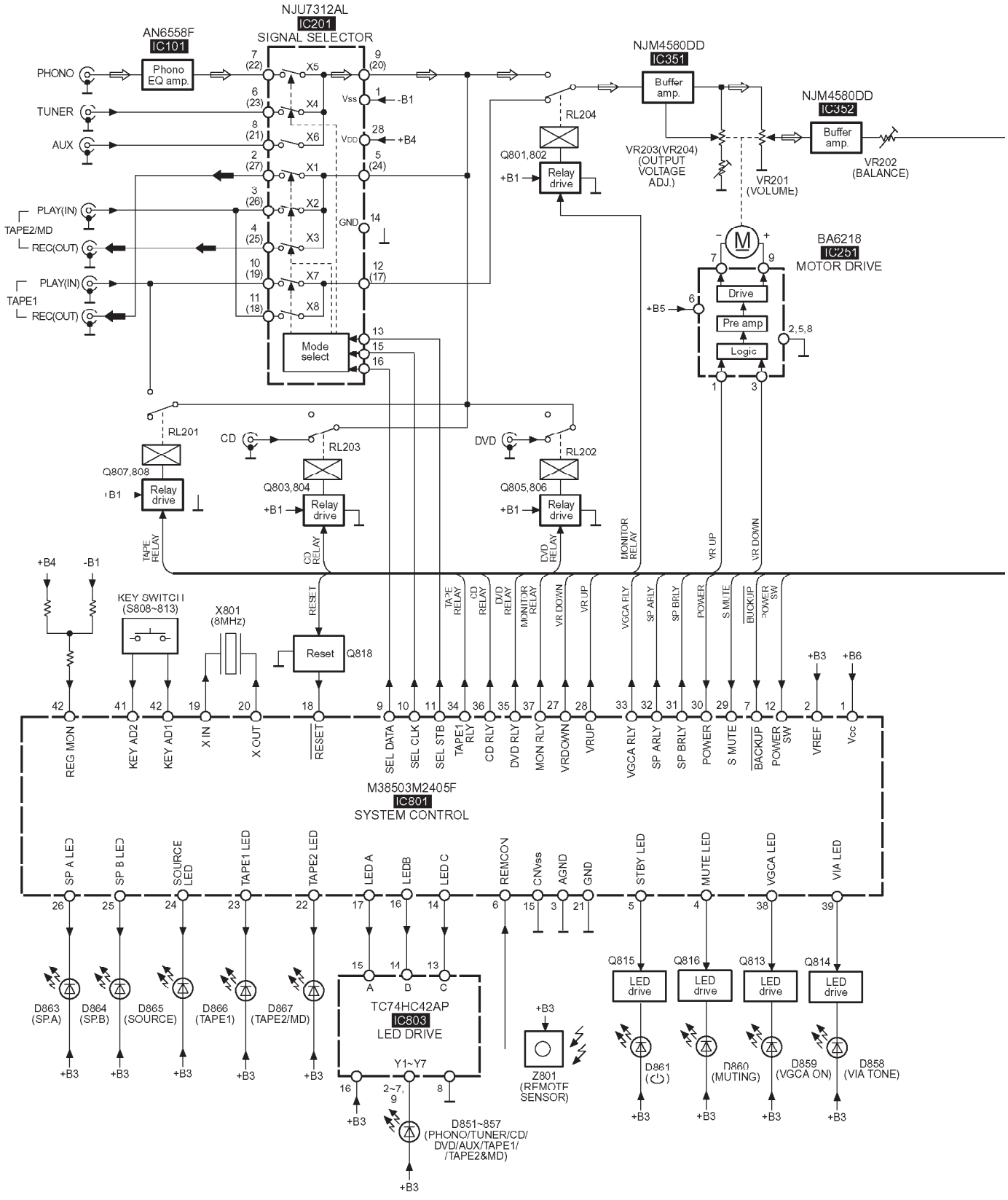
With a tape deck with 3 heads, it is possible to monitor the sound recorded.

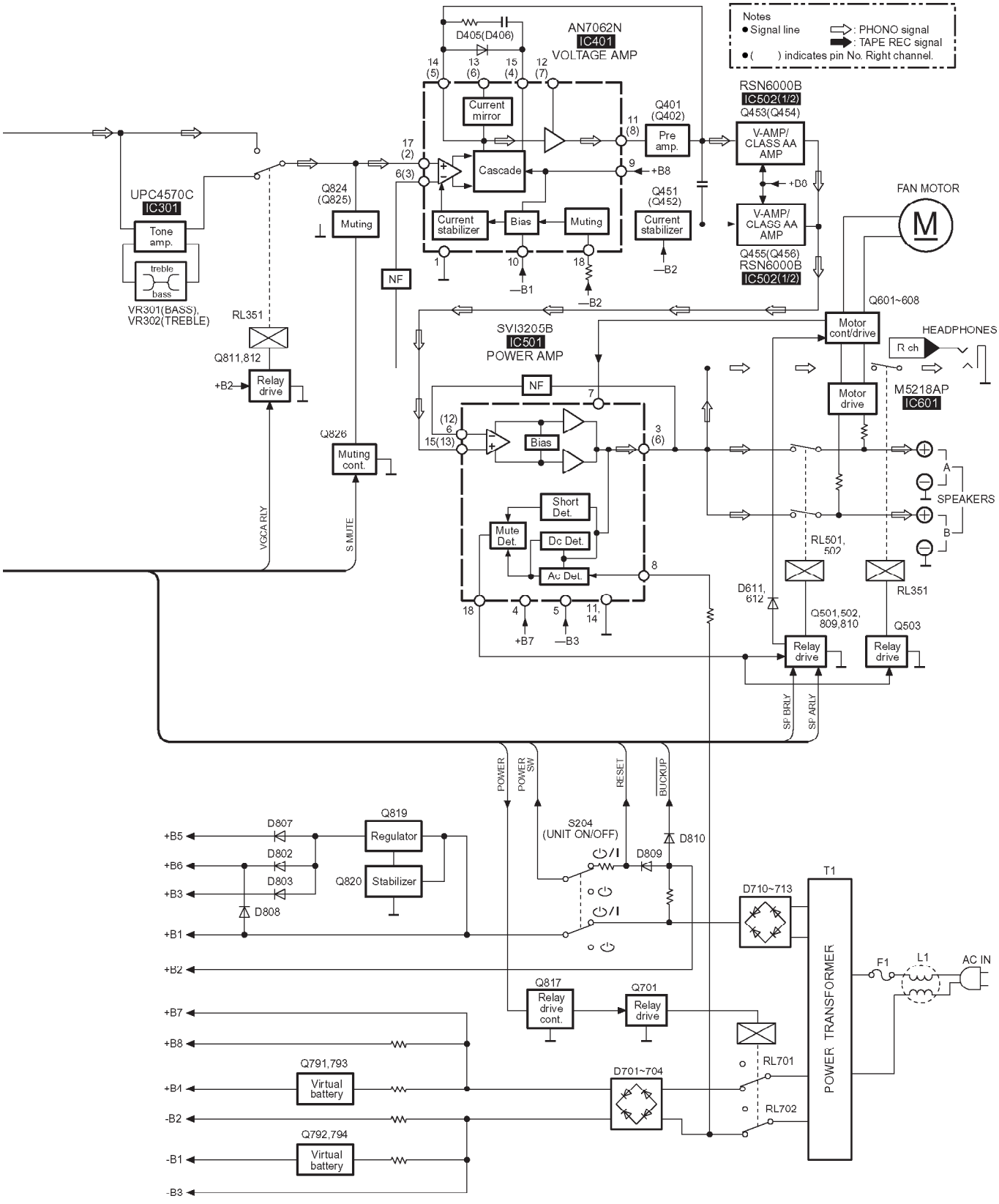
Press [TAPE MONITOR (TAPE 1 or TAPE 2/MD)] and set the monitor switch on the tape deck to "TAPE".

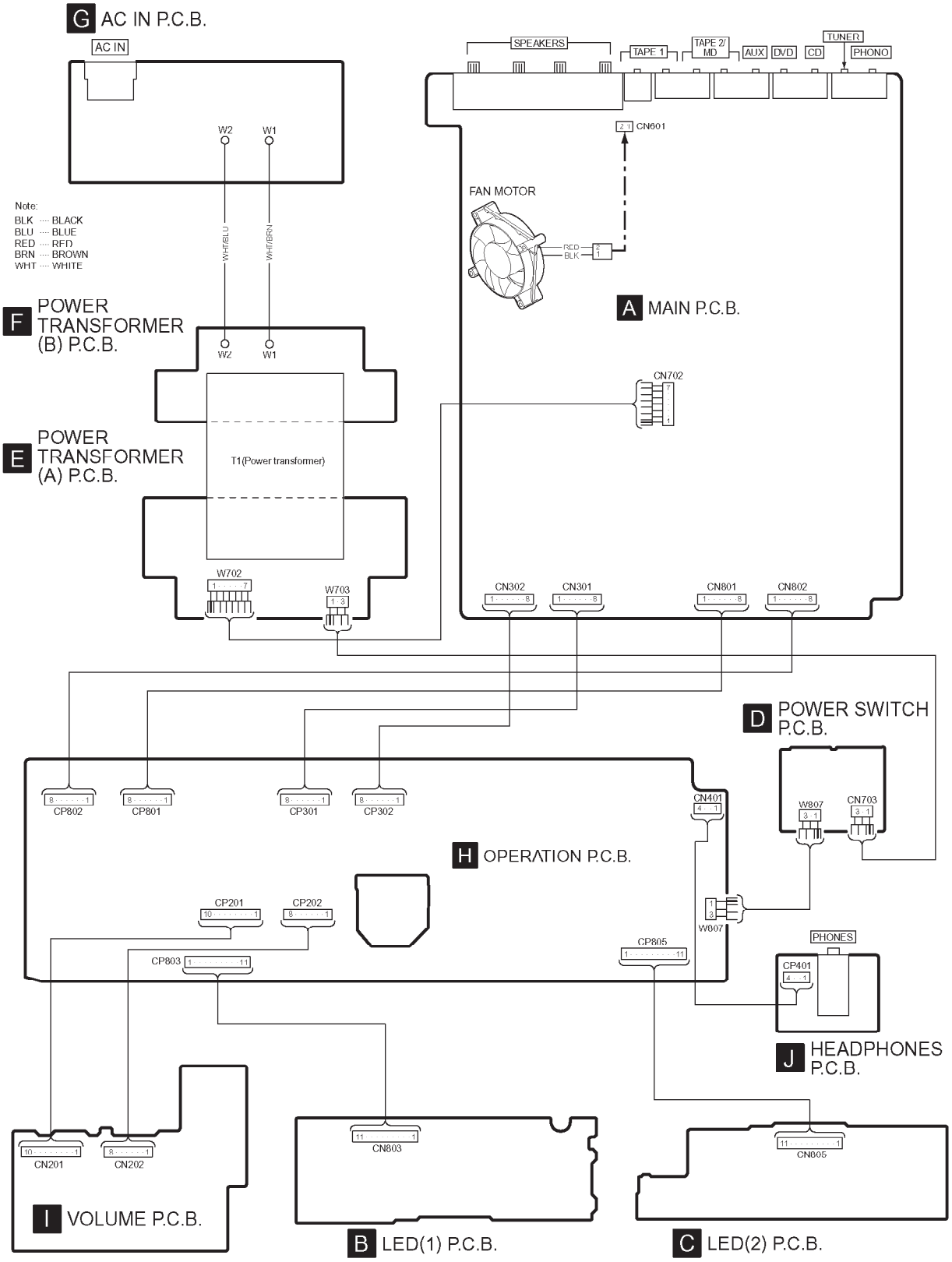
TAPE 1: To monitor the deck connected to the TAPE 1 terminals.
TAPE 2/MD: To monitor the deck connected to the TAPE 2/MD terminals.

Note

When finished using the tape monitor, press [SOURCE] again.


NJU7312AL
IC201
SIGNAL SELECTOR
AN6558F
IC101
Phono EQ amp.
PHONO
TUNER
AUX
PLAY(IN)
TAPE2/MD
REC(OUT)
PLAY(IN)
TAPE1
REC(OUT)
X1
X2
X3
X4
X5
X6
X7
X8
Vss
-B1
VDD
+B4
GND
Mode select
NJM4580DD
IC351
Buffer amp.
NJM4580DD
IC352
Buffer amp.
RL204
Q801,802
Relay drive
+B1
VR203(VR204) (OUTPUT VOLTAGE ADJ.)
VR201 (VOLUME)
VR202 (BALANCE)
BA6218
IC251
MOTOR DRIVE
Drive
Pre amp
Logic
+B5
2,5,8
RL201
Q807,808
CD
RL203
Q803,804
DVD
RL202
Q805,806
TAPE RELAY
CD RELAY
DVD RELAY
MONITOR RELAY
VR UP
VR DOWN
+B4
-B1
KEY SWITCH (S808~813)
X801 (8MHz)
RESET
Reset
Q818
REG MON
KEY AD2
KEY AD1
X IN
X OUT
RESET
SEL DATA
SEL CLK
SEL STB
TAPE1 RLY
CD RLY
DVD RLY
MON RLY
VRDOWN
VRUP
VGCA RLY
SP ARLY
SP BRLY
POWER
S MUTE
BACKUP
POWER SW
VREF
Vcc
+B3
+B6
M38503M2405F
IC801
SYSTEM CONTROL
SP A LED
SP B LED
SOURCE LED
TAPE1 LED
TAPE2 LED
LED A
LED B
LED C
REMCON
CNVss
AGND
GND
STBY LED
MUTE LED
VGCA LED
VIA LED
TC74HC42AP
IC803
LED DRIVE
Y1~Y7
D863 (SP.A)
D864 (SP.B)
D865 (SOURCE)
D866 (TAPE1)
D867 (TAPE2/MD)
D851~857 (PHONO/TUNER/CD/ DVD/AUX/TAPE1/ /TAPE2&MD)
Z801 (RFMOTF SENSOR)
Q815
Q816
Q813
Q814
LED drive
D861
D860 (MUTING)
D859 (VGCA ON)
D858 (VIA TONE)


Notes
● Signal line
: PHONO signal
: TAPE REC signal
● ( ) indicates pin No. Right channel.
AN7062N
IC401
VOLTAGE AMP
D405(D406)
Current mirror
Cascade
Current stabilizer
Bias
Muting
Pre amp.
Q401 (Q402)
Q451 (Q452)
RSN6000B
IC502(1/2)
Q453(Q454)
V-AMP/ CLASS AA AMP
Q455(Q456)
FAN MOTOR
UPC4570C
IC301
Tone amp.
treble
bass
VR301(BASS), VR302(TREBLE)
Q824 (Q825)
Muting
NF
RL351
Q811,812
Relay drive
SVI3205B
IC501
POWER AMP
Motor cont/drive
Q601~608
HEADPHONES
R ch
M5218AP
IC601
Motor drive
Q826
Muting cont.
Short Det.
Mute Det.
Dc Det.
Ac Det.
SPEAKERS
A
B
RL501, 502
D611, 612
Q501,502, 809,810
Q503
VGCA RLY
S MUTE
SP BRLY
SP ARLY
POWER
POWER SW
RESET
BUCKUP
Q819
Regulator
Q820
Stabilizer
D807
D802
D803
D808
S204 (UNIT ON/OFF)
D809
D810
T1
D710~713
POWER TRANSFORMER
F1
L1
AC IN
Q817
Relay drive cont.
Q701
Relay drive
RL701
RL702
D701~704
Q791,793
Virtual battery
Q792,794
Virtual battery
+B5
+B6
+B3
+B1
+B2
+B7
+B8
+B4
-B2
-B1
-B3


G AC IN P.C.B.
AC IN
W2
W1
Note:
BLK ···· BLACK
BLU ···· BLUE
RED ···· RED
BRN ···· BROWN
WHT ···· WHITE
WHT/BLU
WHT/BRN
F POWER TRANSFORMER (B) P.C.B.
W2
W1
E POWER TRANSFORMER (A) P.C.B.
T1(Power transformer)
W702
W703
SPEAKERS
TAPE 1
TAPE 2/ MD
AUX
DVD
CD
TUNER
PHONO
CN601
FAN MOTOR
RED
BLK
A MAIN P.C.B.
CN702
CN302
CN301
CN801
CN802
D POWER SWITCH P.C.B.
CP802
CP801
CP301
CP302
CN401
W807
CN703
H OPERATION P.C.B.
CP201
CP202
CP803
W807
CP805
PHONES
CP401
J HEADPHONES P.C.B.
CN201
CN202
I VOLUME P.C.B.
CN803
B LED(1) P.C.B.
CN805
C LED(2) P.C.B.